



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

5335.
e. 48



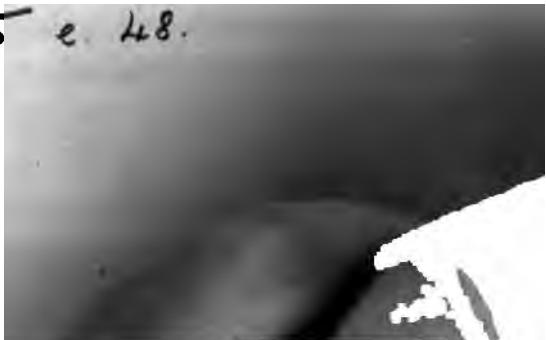
600008174Q

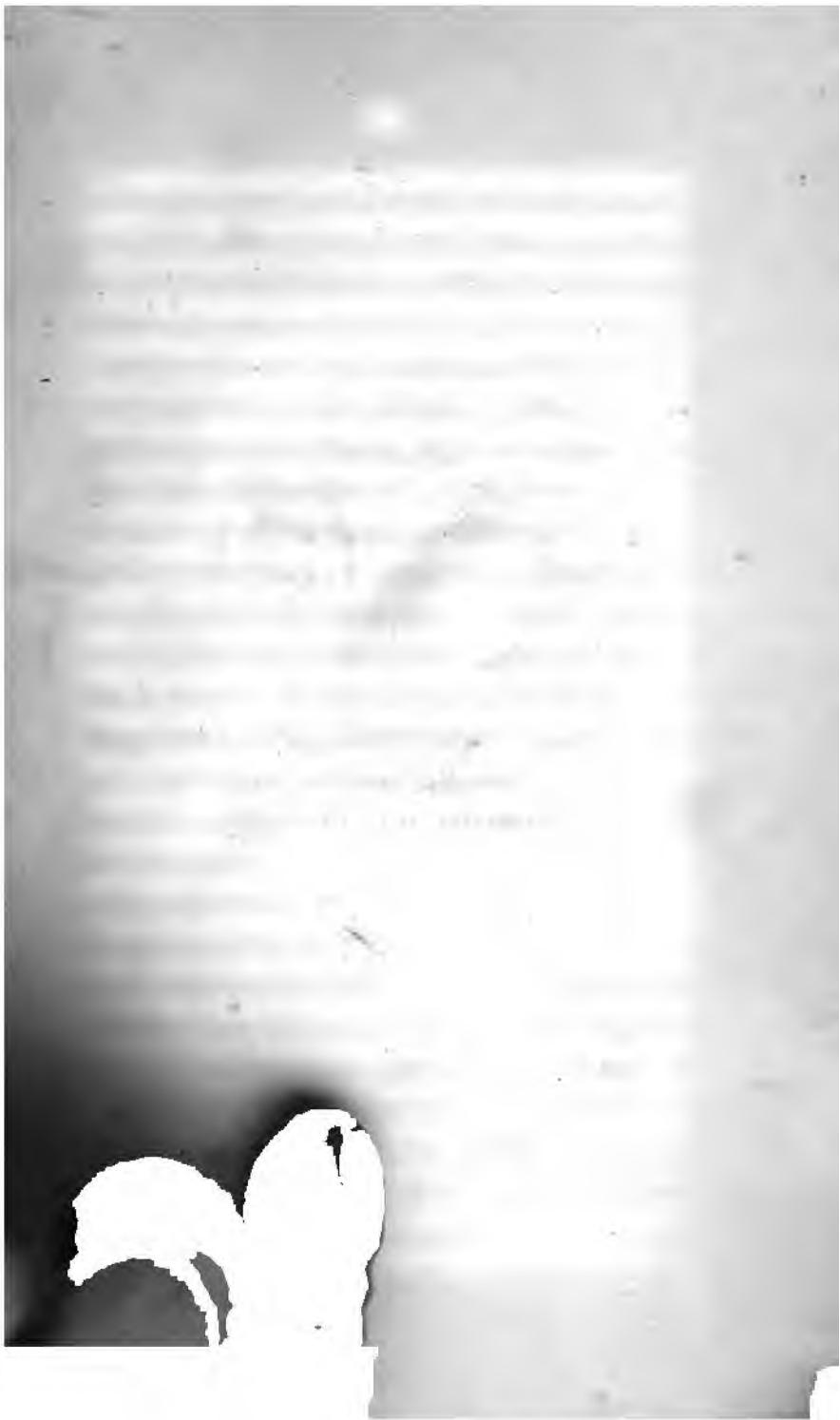
G.1971. 13. 19.



E. BIBL. RADCL.

~~15335~~ e. 48.





AN
E S S A Y
ON THE
SYMPTOMS, CAUSES, AND TREATMENT,
OF
INVERSIO UTERI;
WITH
A HISTORY
OF
THE SUCCESSFUL EXTIRPATION
OF THAT
ORGAN,
DURING THE CHRONIC STAGE OF THE DISEASE.

BY W. NEWNHAM, ESQ.

London:

PUBLISHED BY E. COX AND SON, ST. THOMAS'S-STREET, BOROUGH:

SOLD BY LONGMAN, HURST, REES, ORME, AND BROWN, PATERNOSTER-ROW; CALLOW,
CROWN-COURT; HIGHLEY AND SON, FLEET-STREET; LEADERWOOD, FLEET-STREET;
ANDERSON AND CHASE, WEST SMITHFIELD; A. DICKINSON AND CO. EDINBURGH; HODGES
AND M'ARTHUR, DUBLIN; AND J. NICHOLS, FARNHAM.

ON VEND AUSSI, CHEZ TREUTTEL & WURTE, SOHO-SQUARE; A PARIS, RUE DES LIEUX; ET A
STRASBOURG, RUE DES SERRURIERS, CHEZ LES MEMES LIBRAIRES.

1818.

BARNARD AND FARLEY,
88 New Bond, London.

TO

ASTLEY COOPER, ESQ. F.R.S.

g.c. g.c. g.c.

THE

FOLLOWING PAGES

ARE RESPECTFULLY DEDICATED,

AS A

Testimony

OF

GRATITUDE AND ESTEEM,

BY HIS OBLIGED PUPIL,

WILLIAM NEWNHAM.



PREFACE.

THE substance of the following sheets having been drawn up for publication in a different form from that in which it is now presented to the public—its general contents have been canvassed somewhat extensively, during the many months that have elapsed, amongst a large circle of medical acquaintance.

This delay in the publication of the case, has however enabled the Author to become acquainted with the sentiments of his professional brethren on the subject, and has induced him to undertake the present more extended design.

A considerable diversity of opinion appears to prevail, with regard to the pro-

priety and practicability of the operation suggested and recommended in the subsequent pages. There are some, and these form by far the most numerous class, who doubt its *authenticity*; they believe such an operation to be hazardous and unwarrantable,—necessarily followed by the death of the patient;—and that *if it ever* has been successfully performed, it is one of those lucky miraculous escapes, by which the miserable invalid sometimes recovers, in spite of all that can be effected to destroy her.

There are others who acknowledge that it *may* have been performed; but they say, “There is *nothing novel in the operation*; it “has been accomplished successfully “many times before, and why therefore “publish the case as important?”

There is a third class who reconcile the difference of these discordant opinions by

the obvious fact, that by much the larger portion of the profession are really unacquainted with the successful details of similar operations; while they are well informed of the fatal symptoms, which have followed the application of a ligature by mistake or inadvertence, upon a portion of the *os uteri*, instead of the peduncle of a polypus, and consequently that they do in fact believe success to be impossible:—while the smaller number of depreciators, who deny the novelty of the case, are to be found among that class of literary Gourmands, who *now* recollect similar instances, which have been long ago presented to their minds during the course of their midnight readings, and which were *then* received with that degree of *incredulity* which has generally been attached to these Histories, by contemporary writers, not immediately connected with the authors of such cases;—but which faithful

memory now retraces, and invests with a degree of “*vraisemblance*” and *probability*, which they did not originally appear to possess. And they conclude, that the present case is *important* in settling the general opinion, and countenancing the truth of former similar relations.

This essential difference of opinion is a powerful argument in favour of the accompanying History, and fully justifies the propriety of its publication; as it must go far to prove, that such an operation is practicable and safe; while it produces the former questionable evidence on the subject, and gives it all the weight it is capable of receiving, by the simple details of the present case, *authenticated as it is by its previous History, by the operation having been witnessed by other medical men—by the living testimony of the woman, and by the evidence afforded by the large portion of uterus removed.*

In presenting this Essay to the Medical Public, the Writer has no interest to serve but that of suffering humanity ; and had it not been for the purpose of satisfying the most *sceptical* of his brethren, as to the authenticity of the case, he would have infinitely preferred the obscurity of an anonymous Publication, to the present more obtrusive medium of communicating his facts, opinions, and reasonings.

His object has been to select and to combine information from a variety of sources, scattered throughout a multiplicity of volumes, which it is not in the power of many to peruse ; or whose inclination leads them to prefer condensed and abstracted intelligence, to the trouble of seeking after it, under the load of rubbish, with which it is often encumbered and obscured.

The Author has not laid claim to any superior wisdom in determining upon, or

conducting the operation; neither has he asserted the *perfect novelty* of the case: on the contrary, he has attempted to bring together in one view, the present state of our knowledge on the subject of *Inversio Uteri*; and then by *rational deduction*, and by a *reference to the details of the annexed History*, has endeavoured to settle the opinions and the practice of obstetricians, with regard to the treatment of this particular disease. Ardently devoted to the study and the practical duties of his profession, he will feel happy, if the extensive opportunities afforded him, shall enable him to contribute in any remote degree, to the perfection of the noblest of sciences.

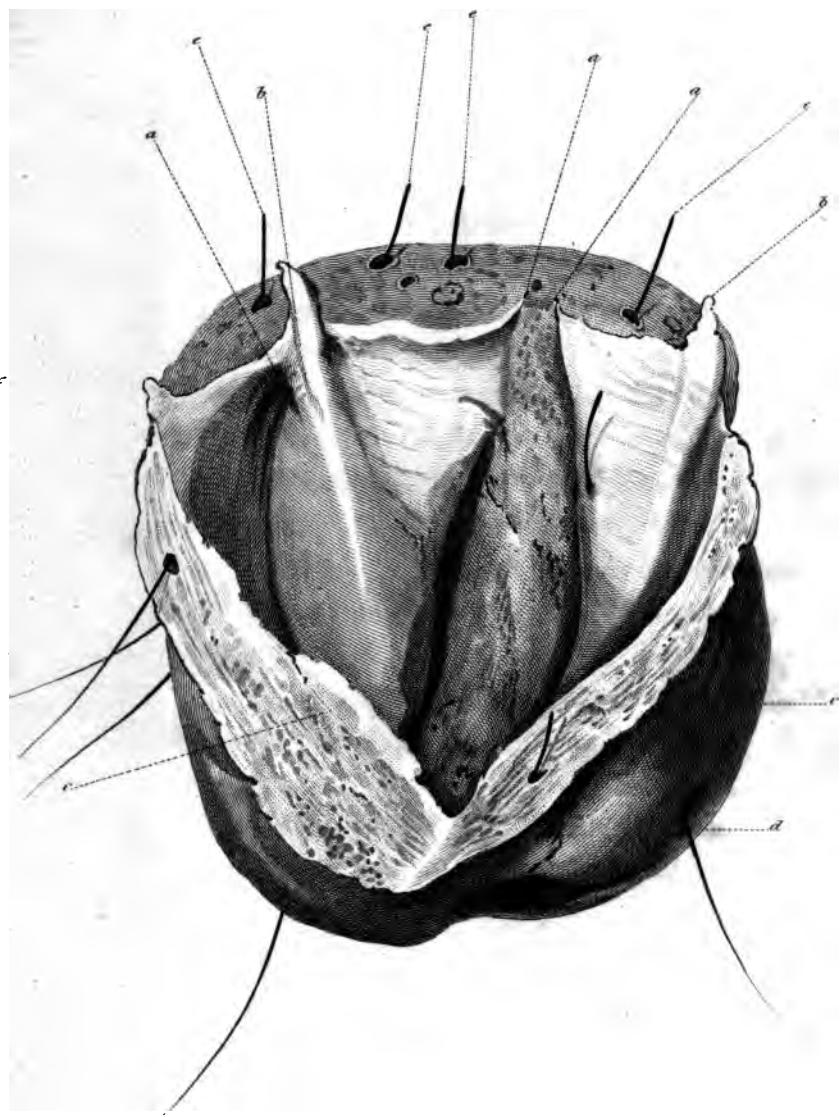
The Writer has only to apologize for the number and the length of his citations from various Authors. Nothing could be more distant from his intentions, than to make a pedantic display of extensive sources of information: but it was of the very

essence of his plan, to exhibit not so much his *own conclusions derived from these sources*, as the opinions of others, in their naked simplicity—in order to shew the *existing state of our knowledge of this disease*; to *prove the propriety of the operation to be recommended*; and to show that such a *mutation might occur, without occasioning present or future inconvenience to the patient*.

In accomplishing this design, he trusts he shall have rendered an acceptable service to the Profession; and, should he be fortunate enough to merit their approbation, he will only be stimulated to pursue more widely, a plan he has long since meditated, of illustrating practically, at some future day, the more important Diseases of Females, connected with the function of Parturition.

Farnham, May 15th, 1818.





EXPLANATION OF PLATES.

PLATE I.

EXHIBITS an internal view of the parts which were removed. An incision has been made into the parietes of the tumour, in order to shew the regularity of its cavity—its peritoneal lining;— and the broad ligaments which it contains. The depression, which is observable at the lower part of the tumour, did not originally exist, and is a consequence of its having long rested upon a projecting surface of the bottom of the glass in which it was preserved.

- a. a. a. Point out the adhesions which had taken place from the action of the ligature, and which serve to destroy the uniformity of the cavity by the consequent union of parts, which were not naturally connected.
- b. b. The broad ligaments. Upon these, the peritoneal covering, which is every where lining the internal surface of the tumour, is more particularly distinct.

- c. c. Mark the incision which has been made into its parietes, and shew the muscularity of the structure which has been divided—together with the course of the muscular fibres.
- d. A bristle introduced into one of the Fallopian tubes: the orifice of the other tube is not visible in this view of the preparation.
- e. e. e. e. Bristles introduced into the orifices of vessels leading to the tumour. The mouths of other vessels, are likewise perceptible, upon the superior surface, which however had been rendered impervious by the adhesive process. The immense supply of blood, to this organ, is an additional proof, if such were really needed, of its being absolutely the uterus.



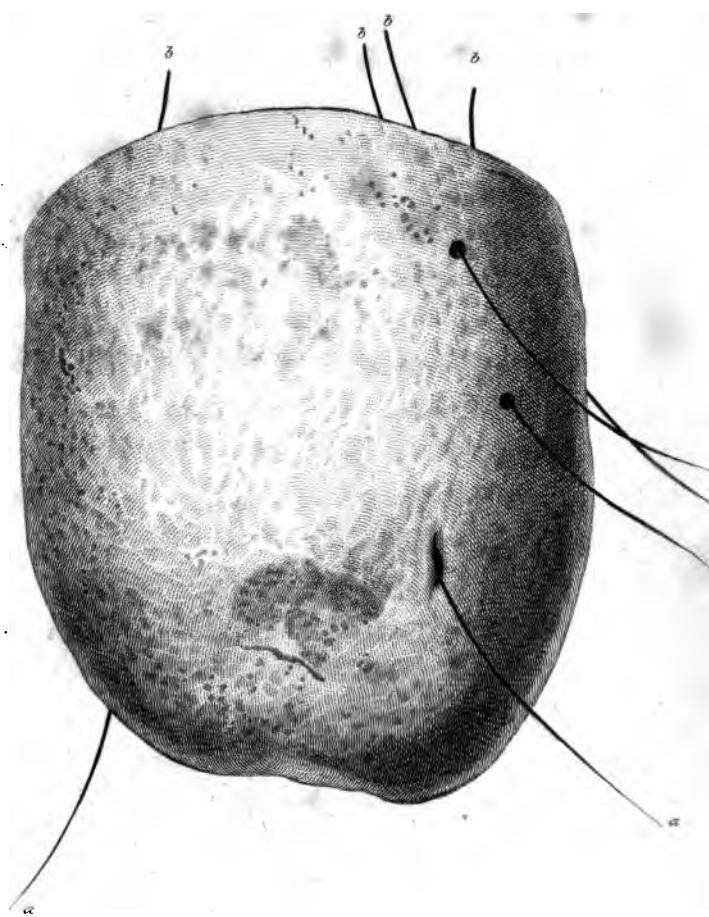


PLATE II.

EXHIBITS a representation of the external character of the tumour, corresponding with the interior of the uterus. The mouths of many minuter vessels are perceived opening upon its surface.

- a. a. One of these letters points to the bristle introduced into one of the Fallopian tubes (Plate I. lit. d.); the other indicates a bristle placed in the Fallopian tube of the other side.
- b. b. b. Bristles introduced through several of the large vessels, which are seen at the summit of the tumour, two of which are perceived to open upon its exterior surface.

ERRATA.

P. 22, l. 20, *Dele* external.
25, l. 4, *for* detailed, *read* exhibited.
27, l. 6, *for* when, *read* where.
84, l. 19, *for* case, *read* event.
98, l. 17, *for* instance, *read* instances.
106, l. 11, *for* Herbi-niaux, *read* Herbiniaux.
108, l. 21, *for* cessé, *read* cessée.
l. 22, *for* destiné, *read* destinée.

AN ESSAY,

ſc.

IN the present improved state of obstetrical science, inversion of the uterus is happily a disease of unfrequent occurrence; but it is still so commonly met with, and is attended by consequences so deplorable, as to be an object of the highest interest to the practitioner.

Inversion of the uterus is said to occur when its *internal* surface has become *external*, and is turned down into the vagina, forming a tumour there; while the external or peritoneal surface has become the internal lining of its present cavity,—the aperture of which is towards the abdomen.

This inversion may take place in different degrees, and is usually found in one

or other of the three following states:—
of *depression simply*—of *partial*—or of *complete inversion*. In the former case, the fundus of the uterus is depressed within its cavity, but does not form a tumour in the vagina. The actual existence of this stage of the disease can only be known by introducing the finger into the uterus; and by ascertaining the state of that organ by pressure on the abdomen. By the *former process* the fundus of the womb will be found to have approached the *os internum*, and by the *latter* a corresponding depression will be observed, instead of that regular contraction, which is so familiar to every prudent practitioner. This state is generally accompanied with an effort to bear down, by which it is often converted into *partial* or *even complete inversion*.

When the inversion is partial, the fundus of the uterus is brought down into the vagina, forming a tumour of considerable size, presenting a semi-spherical form, and closely invested by the *os uteri*. In this case the depression of the fundus, ob-

served through the parietes of the abdomen, will be considerably greater than in the former, and the edge of the cavity thus formed will alone be felt.

In the complete inversion, the uterus will be found not only filling the vagina, but protruding beyond it, resembling in its form that of the uterus after recent delivery, only that its mouth is turned towards the abdomen. The os uteri may be felt at the superior extremity of the tumour, forming a kind of circular thickening at its apex, and the uterus is wholly wanting in the hypogastric region. This state is usually accompanied with inversion of the vagina.

Inversion of the uterus is commonly attended with hemorrhage, though this symptom is not always in proportion to the degree of inversion: the pain is very severe, and the tumour is exquisitely sensible. From the combined influence of these causes, the patient feels the greatest prostration of strength—she has often nausea, fainting, and convulsions: her

countenance is pale, and her pulse feeble, fluttering, and scarcely to be felt.

It has been asserted, that inversion of the uterus may occur in the unimpregnated state; but there is great reason to believe that such histories have been actually polypi, since it is difficult to imagine the possibility of a similar case, unless the parietes of the organ had been previously distended, and the *os uteri* had been dilated, to admit of their passage through it. It must, however, be allowed, that partial inversion may take place by the long-continued dragging of a polypus, on the situation where its peduncle is implanted; but in this case the disease occurs in a slow and gradual manner, and is unattended by those violent symptoms, which characterize its recent formation.

Baudelocque, and a few other authors, relate cases in which the uterus has become inverted, some hours, or even days, after delivery: but in such instances, it is to be presumed, that a depression or partial inversion of that organ had previously taken

place, which had *afterwards* become complete.

The most frequent cause of inversion of the uterus is the imprudent management of the placenta, and rude attempts to hasten its expulsion, by pulling at the chord; but this accident may likewise be occasioned, when the patient is encouraged to make vehement voluntary efforts to bear down, at the moment when the foetus is about to be pushed into the world: it may be produced by the child being suddenly born, while the woman is in an erect position, and consequently the excessive capacity of the pelvis will be a predisposing cause of the disease; and it may arise from carelessness in the management of delivery when the funis is either preternaturally short, or is rendered so, by its being coiled round other parts of the body. These causes will all operate more powerfully in proportion as the uterus may be in a torpid or atonic state*.

* The too great projection of the sacro-vertebral angle has been mentioned as a cause of *inversio uteri*,

From the recital of these causes, it is evident that the inversion of the uterus will be most successfully prevented, by acting upon the simple scientific principle of waiting the return of uterine pain, before employing any extractive force for the removal of the placenta; and of attempting its delivery, *when this is immediately necessary*, rather by exciting uterine contraction, than by any misdirected pulling of the chord. The safety of the patient consists only in a state of contraction of the uterus, and this, therefore, is the object most earnestly to be sought after by the practitioner. The other causes of this accident will be obviated, by moderating the efforts of the woman, during the last stage of labour, and waiting quietly for pain, after the head is born, instead of effecting the delivery of the trunk by manual assistance;—by confining the patient,

in an ingenious modern work, which really forms a great curiosity in the history of obstetrical Literature. Vide "Memorial sur L'Art des Accouchemens, par Madam Veuze Boivin, Maitresse Sage-Femme, &c." à Paris, 1817.

in every instance, and especially when the pelvis is more capacious than ordinary, to an horizontal position, from the moment that the head begins to press upon the perinæum ; by insisting that she should not be moved off the bed, during that too frequently unfortunate process of "*putting her to rights,*" as it is falsely termed ; and by attending carefully to the state of the umbilical chord, enlarging its coil, where this is possible, so as to pass it over the foetal head, or to allow the body to slip through it, or tying and dividing it when this is impracticable. The extreme shortness of the chord should always be guarded against, by taking care in every instance to keep the belly of the foetus close to the external parts of the mother. And if these simple precautions be but kept in view, and diligently acted upon, an atonic state of the uterus would scarcely ever be met with. Uterine atony arises from previous excitement and over-action ; moderate that action, and the power of the organ will be preserved, and its state of inertia almost unknown.

But if, notwithstanding an attention to these precautions, inversion of the uterus shall have taken place, it is desirable to effect its restoration at once, and consequently it is highly important to become early acquainted with the existence of the disease; and as this can always be ascertained satisfactorily by the most simple means, it is extraordinary that a precautionary measure of this kind should ever be forgotten. It has often happened, that the death of the patient has taken place from hemorrhage, and the cause has never been discovered, till on examination post mortem, the uterus was found inverted in the vagina. In every instance, therefore, after the delivery of the placenta, one or more fingers of the operator should be introduced into the vagina, in order to ascertain that the uterus is not inverted. If this simple process were attended to, chronic inversion of the uterus would be known only by description.

The immediate consequences of this accident are hemorrhage, more or less con-

siderable, accompanied with severe pain and expulsive efforts, and rapidly followed by syncope, convulsions, nausea, vomiting, hiccup, and death. But it frequently happens that this affection does not prove immediately fatal, and the wretched patient escapes the first order of accidents, only to become a prey to the consecutive inflammation and constitutional irritation, with gangrene of the part, heightened as these symptoms generally are by retention of urine, and by the constriction of the os uteri, where the organ is only incompletely inverted. And if the patient has sufficient strength of constitution to struggle through the severity of her sufferings, the uterus may diminish to its natural size; she remains subject to the most debilitating hemorrhage, and a constant mucous discharge; she has repeated attacks of protracted and alarming syncope; dropsical effusions, or hectic fever succeed, and the patient, after vainly combating with her hopeless situation, is conducted to the grave in the most miserable manner.

But it must be confessed, that although

this is the general train of symptoms, it sometimes happens that women survive all these accidents, and recover a tolerable state of health. The uterus contracts to its natural size, and ceases to be productive of material inconvenience. Under these circumstances, menstruation is performed as usual; generally, however, the evacuation is more profuse than natural, and considerable mucous discharge occurs during the interval. In this unnatural state, the uterus is more liable to take on diseased actions, and consequently we find that it frequently becomes schirrous, or is attacked by gangrenous or malignant ulcerations.

Sometimes, though very rarely, a spontaneous reduction of the inverted portion appears to have taken place. This at first sight may seem inconsistent with the fact formerly mentioned of the tendency of incomplete inversion to become complete; but the two opinions will easily be reconciled, when the different states of the uterus to which they are applicable, are considered. The latter rare and happy event, can only happen in the case of simple de-

pression of the fundus of the womb ; and even then can never be relied upon*.

It has been said, that the action of a pessary, introduced for the purpose of supporting the inverted uterus, has by its steady and long-continued pressure, effected the reduction of that organ. On this subject I may be allowed to quote a foreign author of celebrity (Jourdan.)—

“ L'usage du pessaire lui devient ensuite indispensable, principalement lorsque, par un hasard heureux et peu commun, le col de l'utérus a prêté peu à peu, sans exercer aucune compression sur la portion de l'organe qui le traverse†.”

Cases are on record in which a spontaneous cure has been effected, not only in the simple depression of the fundus uteri, but also, where incomplete inversion had taken place. Delabarre, a surgeon of Beau-

* Vide Capuron, *Traité des Maladies des Femmes*, p. 504, 509.

† *Dictionnaire des Sciences Médicales*. Vol. 23, p. 291. Article *Hysteroptose*.

zeville, reported a case of this kind in his own wife, after the uterus had been inverted eight months. This extraordinary fact was received with a great deal of incredulity, when a similar case happened to Baude-locque, in the person of a lady, who had been annoyed by inversion of the uterus for eight years*. If these cases will not allow us to *despair* of the resources of nature under similar circumstances, still they do not afford *a hope* that so happy a termination would often occur; even if it were fully proved that the disease had not been mistaken.

Other instances of the termination of *inversio uteri* are recorded. Rousset relates a case, where six years after inversion had taken place, the tumour became gangrenous, and finally sloughed away, and the patient recovered entirely. On examination of the part removed, it was ascertained satisfactorily that it was the uterus; and the patient dying three years afterwards,

* Capuron, *Traité des Maladies des Femmes*, p. 512.

it was discovered, on examination of the body, that the uterus was wanting*.

These are fortunate events; it is well to be acquainted with them, as they afford perhaps to the patient a gleam of hope, which will cheer the last moments of existence, though she may be in desperate circumstances; but the practitioner would be criminal indeed, who ventured to build his practice or his hopes on events so precarious.

The treatment of this disease must be founded on the most simple principles. The grand indication is to restore the uterus *immediately* to its natural state. And this is effected with comparative ease, if the inversion has taken place, after delivery, and no long period has elapsed, before the patient is visited. Denman, however, found its reduction impossible at the expiration of four hours after delivery. If the inverted uterus shall have been expelled beyond the

* Nauche, *Maladies de l'Uterus*, p. 190.

os externum, it is first to be returned into the vagina. A difference of opinion has prevailed on the treatment of this disease, according to the circumstance of the placenta still adhering to the uterus, or having been previously removed. It has been recommended by several respectable authorities*, to remove first the placenta, in order to diminish the bulk of the inverted fundus, and thus facilitate its reduction. But it is surely impossible that this proceeding can be attended by beneficial consequences, while its irritation of the uterus would necessarily tend to bring on those bearing-down efforts, which would present a material obstacle to its reduction ; and would increase the hemorrhage, at a period when every ounce of blood is of infinite importance : for it has often happened, that although the uterus has been reduced, and the patient has appeared to be doing well, a sudden and prolonged syncope, or convulsions have occurred, and closed the scene. Besides returning the placenta,

* See Baudelocque, Gardien, Capuron, Boivin—and perhaps also Denman, *in some instances.*

while it remains attached to the uterus, and its subsequent *judicious* treatment as a simply retained placenta, will have a good effect in bringing on that regular and natural uterine contraction, which is the hope of the practitioner, and the safety of the patient.

Whether therefore the placenta may have been removed or not, the treatment is the same ; and the first object, to re-invert the uterus. It has been made a question whether the fingers of the operator should not be defended by some soft linen ; and *mechanical means* have been proposed ; but it is obvious how improper must be all such contrivances ; and it is clear, that the best instrument is the cautious introduction of the hand well smeared with some fatty substance, and its *gentle* and judicious employment.

If the inversion of the uterus be only partial, and the accident be recent, its reduction will be easily effected. It will be sufficient to make gentle pressure on the fundus of the uterus, by means of the

fingers united into a conical form, and the inverted portion will be returned. But if the inversion be complete, and the disease have existed for some time, (a few days, or even perhaps a few hours), the difficulty will be much increased, and a method somewhat different should be employed. It is here to be remembered that the cervix uteri is constricted around the neck of the tumour. It is therefore the wisest and best practice to introduce the hand, and gently grasping the tumour, endeavour to re-invert the uterus, by returning *first* that portion of it, which was *last expelled* from the os uteri. This process will be considerably assisted by pressing upwards the fundus of the uterus, at the same time, that we compress gently its superior portion. Here it is in fact, that the rules for the reduction of strangulated hernia are important, and should never be forgotten. The delicacy and sensibility of the organ are to be remembered ; and all rude and needless irritation should be avoided.

Having reduced the inverted portion, the hand is to be kept in the uterus, and gently

moved in its cavity, in order to excite that organ to contraction. Frictions upon the abdomen, and the application of warm flannels will have a beneficial influence. The hand of the operator should not be withdrawn, till uterine contraction has been sensibly felt, and the placenta has been detached and expelled into the vagina. Under these circumstances, a full dose of opium will be found signally beneficial in supporting the *vis vitæ*, preventing syncope, and restraining hemorrhage by exciting uterine action.

Violent attempts to return the inverted uterus will be productive of much mischief, and consequently ought never to be employed. It is certain that the first moments in which the accident has occurred, are the most favourable for the removal of its effects. The difficulty increases very much by delay. It has been observed that Dr. Denman found it impossible to effect the reduction of the uterus, only four hours after it had taken place, and never once succeeded in the chronic state. Dr. Blake in his 149th aphorism, directs the reduction

to be effected immediately ; " for the difficulty so much increases with time by the constriction of the cervix uteri, that subsequently all attempts to restore the parts to their proper situation are useless*." Burns too advises only palliative measures; but may not the propriety of this practice be questioned? Is it not reasonable to suppose that the first effect of the accident will be to bring on inflammatory action, and tension of the parts, and that this very state will in itself be a sufficient obstacle to success ?

If, therefore, we do not visit our patient till this inflammatory swelling has taken place, it would be the part of wisdom not to attempt the reduction at all, since vain efforts of this kind will only hurry the inflammation into gangrene. Or if in the first instance we find the reduction impracticable, it will be better not to persist in long continued manipulations of this delicate organ ; but on the contrary, to

* Blake's Aphorisms, p. 54.

reduce the inflammatory action by bleeding, according to the circumstances of the patient, by warm fomentations to the abdomen, by the local warm bath, or by soothing injections ; by keeping the bowels gently open, and by an appropriate diet of barley water, water gruel, &c. And when this first indication has been accomplished, then attempt to re-invert the uterus. The case ought not to be abandoned as hopeless, because reduction has not been effected immediately on the inversion taking place ; for instances are on record, where the restoration of the parts, which was impossible in the first instance, has become easy after the inflammatory symptoms have subsided. Both theory and practice unite in recommending this mode of treatment*.

But if this period has been suffered to pass by unimproved, and the patient still survive the shock, which the constitution must have received, the hemorrhage dimi-

* See *Baudelocque*, Capuron, Nauche, and the *Dictionnaire des Sciences Medicales*.

nishes by degrees ; (urgent symptoms must be mitigated as they appear ; *retention of urine* by the catheter once or twice a day ; *syncope*, by palliatives, and above all, by keeping the patient in a horizontal position ; and pain by the careful administration of opiates :) and is supplanted by a constant mucous discharge, while the disease assumes that form, which is the principal object of the present Essay, viz. “ Chronic Inversion of the Uterus.”

Chronic Inversion of the Uterus.

WHEN notwithstanding the best directed efforts for its return, the uterus remains irreducible, the patient for the most part lingers out a miserable existence, a burden to herself and to her friends, till she is gradually destroyed by the recurrence of frequent hemorrhage, and by a constant mucous discharge. Indeed, the immense drain upon the constitution in this way, can scarcely be appreciated, but by those who have actually witnessed its effects.

In this state of almost hopeless disease, little can be effected towards the relief of the patient. If the uterus be completely inverted, it should be returned within the vagina, and distressing symptoms palliated as they occur. It is particularly important to keep the bowels gently open, and the bladder regularly evacuated.

It has been recommended by some authors to check the mucous discharge by the injection of astringent lotions; and it has been objected to this practice by others, that it was probable the delicate internal surface of the uterus might be *irritated* by such treatment, and be induced to assume an unhealthy, if not malignant action. Perhaps there may be but little real danger of this evil; but the objection will induce the practitioner to prefer the mildest and least irritating fluids. The injection of cold water will frequently produce a good effect, and contribute to the cleanliness and comfort of the patient; and when this is efficient, it is always to be preferred. A simple decoction of oak-bark alone, or with a small proportion of *alum*, would be ad-

missible ; but the more irritating astringent fluids should be avoided.

A difference of opinion exists too on the use of pessaries. Authors in general prefer their employment, though there are some weighty objections against the practice, on account of the irritation excited by the pressure of a foreign body, on a structure so delicate. Charles Clarke, in his Treatise on mucous discharges, observes, that “ Pessaries are useless ; for the vagina is already so filled, that nothing more can be retained in it.” Yet since we have reason to believe that pessaries have been useful in indirectly assisting the spontaneous reduction of the inverted uterus : and since in walking; or stooping, or straining, the tumour is often protruded beyond the external parts, and is thus exposed to contact with the external air, and to a variety of accidents, which induce inflammation and ulceration of its surfaces, and increase the natural and inevitable evils of this disease, there can be no question, but that a preference ought to be given to the use of the pessary.

From the exhausting discharge which they sustain, such patients require a nutritious diet, and the greatest watchfulness. After all, we shall generally find our efforts unavailing; the woman's comfort is destroyed; and she is going, slowly perhaps, though not less surely, to a premature decease. Under these circumstances, are we not justified, are we not imperiously called upon to prefer extirpation of the uterus, to inevitable destruction? This operation has been repeatedly successful, in cases, where the uterus has been completely inverted, and it has been removed by an incision or ligature of the vagina; where the uterus has ceased to perform its menstruating functions; and where it has become scirrhouς, gangrenous, and very much reduced from its natural size. It remains to be proved, that the same result may be anticipated, in cases where the woman has not passed the menstruating age, and the uterus still retains a considerable size. But on these interesting topics, I shall defer making any observations, till after the relation of the following case, which will afford sufficient grounds for just reasoning upon this sub-

ject, and which goes far to prove the point in question.

But as the possibility of performing any operations upon the uterus is a question of great interest, I think I shall be excused for introducing in this place a short account of what has been effected in this way.

The section of the os uteri, when peculiarly rigid, has been performed to facilitate parturition, by Lambron, Simson *, and others; while the body of the uterus itself has been submitted to incision by Gautier, at Paris, and by Osiander, at Gottingen. These operations are mentioned, and recommended under appropriate circumstances, by all the continental writers on midwifery †.

But the present day has produced yet bolder operations upon this important organ, even the extirpation of a portion

* Edinburgh Medical Essay, Vol. III. Art. 19.

† See authors quoted hereafter.

of the uterus, for the disease of scirrhos. The detail of the modern operations of Dupuytren, surgeon at the Hôtel Dieu, has not yet been fairly detailed to the public, notwithstanding the success which has attended several instances. Enough, however, is known from the proceedings of Dupuytren and Osiander, to be assured that a considerable portion of the uterus may be extirpated, without great difficulties. Each of these surgeons has operated eight times, and no disquieting hemorrhage, or other alarming symptoms, have been the consequence. As is usual with other cases of scirrhos, the disease has returned in several instances, or has attacked some other part of the body, while the organ primarily affected has remained free from morbid irritation. In performing the operation, the uterus is gently drawn lower into the vagina by means of ligatures passed through its substance, and the diseased portion is removed by a curved bistoury*.

* For a description of this instrument, see Dict. des Sciences Médicales, Vol. XXIII. Art. *Hystérotome*.

Successful operations on the body of the uterus are related by Gautier, Martin, and Flamant*.

Before quitting this subject, however, it is necessary to refer more particularly to the Cæsarian operation; an operation which has been performed with considerable success, by different individuals, with the view of preserving the life of both mother and child, in cases where delivery was impracticable by other means; or to save the life of the child, under circumstances where the mother has died before the period of gestation has been completed, or the process of parturition sufficiently advanced to admit of other means of delivery. In the latter cases, however, from the difficulty of distinguishing between real and apparent death, it will generally be more prudent to dilate the os

* On this interesting subject, consult a well-written paper by Gardien, in the *Dictionnaire des Sciences Médicales*, Vol. XXIII. p. 293—306. Art. *Hystérotomie*.

uteri, and deliver the fœtus by the operation of turning.

The Cæsarean operation, therefore, is principally applicable to those cases of mal-conformation of the bones of the pelvis, when the deformity is so great as not to admit of the expulsion or extraction of the fœtus, though in a mutilated state, by the usual route.

This operation was successfully performed in the sixteenth century, by a sow-gelder, on the person of his own wife; and in January, 1738-9, it was attended with success in the hands of an ignorant midwife, under circumstances the most disadvantageous. Another case is related of a similar result (*Edinburgh Medical Essays*, Vol. V. Art. 37 and 38) under equally hopeless auspices.

These are solitary instances: but there are on record so many authentic histories of the operation, and its success, that it cannot be doubted. Out of two hundred and thirty instances mentioned by Baude-

locque, there are one hundred and thirty-nine cases, in which the life of the mother has been saved. And I have been informed, that very recently, a well-authenticated case of the successful performance of this operation, with perfect safety to both mother and child, has been transmitted from the Continent, to the Medico-chirurgical Society, and placed on the record of their Transactions.

It is indeed true, that among these accumulated histories, it is probable that some cases were instances of gastrotomy, for the delivery of extra-uterine fœtuses, in which the uterus itself was never wounded; and it is certain that in others, it has been most injudiciously and unwarrantably performed upon individuals who had previously borne children, and who were subsequently delivered by the simple efforts of nature.

Yet it is impossible thus to explain away the whole testimony on record in its favour; and it is absurd and unscientific to shut the eyes against the light of so

much unquestionable evidence. It cannot be permitted to doubt that the operation has been performed successfully in a great variety of instances: and though in many cases, it may have been attended with fatal consequences; yet, when so great a deformity of the pelvis exists, that without having recourse to such a measure, both mother and child must inevitably perish—surely it is better to employ a doubtful remedy, than to abandon the patient to certain death; and that practitioner cannot be justified, who through timidity, irresolution, or prejudice, suffers his patient to perish, without an attempt to relieve her.

In this country, indeed, the operation has been less successful than on the Continent; but has not this arisen from its being delayed too long? In cases of such extreme deformity, as to render delivery impracticable by other means, (and in no other than such extraordinary cases should it be undertaken) delay can be of no use, except to induce that violent inflammation, the effects of which have been disco-

vered on examination post mortem ; and it is cruelty to defer our assistance, till almost all chance of saving the more valuable life has been lost. This consideration is well worthy the attention of practitioners, to whom such deplorable cases occur, and on whom it is a *duty incumbent* not only to *perform the operation*, but to do so under the most favourable circumstances for the safety of the mother. The abstraction of blood too, so necessary in cases of laborious or impracticable labour, where there is any danger of supervening inflammation, might then be had recourse to with propriety and effect, before the powers of life were irrecoverably sunk by exhaustion *.

Instances are likewise on record of women who have recovered from rupture of the

* Consult, on this subject, the Edinburgh Practice of Physic and Surgery, Vol. V. Art. Hysterotomy ; Edinburgh Medical Essays, Vol. V. Art. 37 and 38 ; Osborn's Midwifery ; and Baudelocque L'Art des Accouchemens, &c. Also, Hamilton's Outlines, Burns, Clarke, and Hull, on Cæsarian Operation.

uterus *: and all these cases taken together, form a mass of evidence, to prove that this organ may be subjected to considerable violence and irritation, without producing fatal symptoms.

HISTORY OF A CASE

OF THE

SUCCESSFUL EXTIRPATION OF THE UTERUS.

Mrs. GLASSCOCK, æt. 24, residing at No. 3, Petty's Court, Hanway Street, Oxford Street, consulted me early in April, 1817, on account of a *constant discharge* from the vagina, of a mucous character, accompanied with frequent hemorrhage.

* See Douglas on Rupture of the Uterus; and Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, Vol. II. Case XV. p. 184.

The appearance of the patient was precisely that of one who had suffered most severely from the loss of blood ; her countenance was exsanguineous ; she had now been in the country a month, for the recovery of her health, but she was daily losing strength ; her appetite was declining ; and she was repeatedly subject to frequent and prolonged syncope. On those days, when she had *the least* discharge, it was *still very* considerable, and required seven or eight napkins in every twenty-four hours, in order to keep her at all comfortable : but the returns of active hemorrhage, were increasingly frequent, and alarming in their degree ; and were induced almost by the slightest exertion.

On examination, I discovered, in the vagina, a tumour of considerable size ; somewhat of a pyriform shape, *larger at its base than at its superior extremity, but not attached by a very narrow neck—surrounded at its apex by the os uteri, between which and the tumour, the finger could be readily passed without discovering any immediate connexion,*

as far as I could ascertain nearly insensible; and which had never occasioned pain. Hasty concluding this tumour to be polypus uteri, I proposed removing it by the simple application of a ligature. A little subsequent reflection, however, on the case, led me to suspect that it was *partial or incomplete inversion of the uterus*, and induced me to inquire more minutely the history of the case.

This patient was delivered on the 21st of January, 1817, of her first child, after a natural labour. She was attended by Mr. ——, of the neighbourhood, and she informs me that the funis was remarkably short—that the placenta was adherent—and that much hemorrhage succeeded its removal. Retention of urine supervened, which required the use of the catheter for a fortnight. No examination per vaginam was made for several days; but on the tenth day after her confinement, Dr. Davis was consulted: the patient's account of his opinion is however vague and unsatisfactory.

This imperfect history* rather countenanced the idea of its being *inversio*; but

* At the time this case was drawn up for publication, I extracted these particulars from my notebook, and they were all I then possessed. Subsequently, however, I have been favoured with a communication from Dr. Davis, (of whose friendship and liberality, on this occasion, I have to speak in the strongest terms of regard) which is highly satisfactory in its details. I preferred, however, publishing the case as it originally stood, in order to exhibit the internal evidence for its authenticity, and to shew the grounds on which the subsequent treatment rested. I have now the pleasure of annexing extracts from Dr. Davis's letter, so far as it relates simply to the case before us.

“ 18, *Charlotte Street, Bloomsbury*,
“ *March 10th, 1818.*

“ **MY DEAR SIR,**

“ I have just seen *Mr. _____*. He peremptorily declines permission to use his name. The following, however, are the facts of the case, as far as I have been able to acquaint myself with them.

“ **Mrs. Glasscock** was delivered on the 21st of January. The chord was remarkably short; not exceeding ten inches in length. In about twenty

did not adequately define the nature of the tumour; for it is sufficiently evident that

" minutes after the expulsion of the child, which was
 " effected by the unassisted efforts of Nature, the
 " placenta was withdrawn from the vagina, where it
 " was felt to lodge. No force was necessary, Mr.
 " _____ states, *none was used to bring it away*. Up-
 " on its removal, however, there was more than an
 " ordinary discharge of blood; and this *was observed*
 " *to gush out from the passage, with much force, and as*
 " *if the source of it had been much nearer to the outlet,*
 " *than what is common on such occasions. The manner*
 " *of its escape, resembled the spouting from the vessels*
 " *of a stump, during the relaxation of the tourniquet, in*
 " *the operation of amputation.*

" No examination was made at this period. 'About
 " 'a pint of blood,' (these are the words of Mr. _____)
 " ' was lost; *perhaps something more.*' The patient
 " was delivered about five o'clock, p. m. Mr. _____
 " saw her again in the forenoon of next day. Nothing
 " remarkable presented itself, excepting that she had
 " not voided any water. He, therefore, introduced
 " the catheter, and took away about a pint and a half.
 " This operation was necessarily repeated on the next
 " day. The same necessity occurring again on the
 " third day after delivery, examination was made into
 " the vagina, and the presence of the tumour was de-
 " tected. I was not consulted till the 30th of the

these symptoms might have arisen *from the growth of a polypus in the uterus, during*

“ same month, and even then no intimation of the
“ actual state of things was given to me.

“ I had been requested to give my opinion in a case
“ of tumour in the vagina. A careful examination,
“ however, soon convinced me of its nature. The
“ patient was then in a state of considerable febrile
“ irritation. I saw her two or three times—prescribed
“ for the constitutional symptoms, and retired with-
“ out giving hope or promise, of substantial relief, to
“ the local affection. Upon consulting his day-book,
“ Mr. —— finds that he was obliged to use the
“ catheter daily (sometimes once, sometimes twice, a
“ day) till the sixth of February. I am further au-
“ thorised by Mr. ——, to state that she was sub-
“ ject to *occasional*, but not *very considerable*, dis-
“ charges of blood, especially upon motion, as long as
“ he continued to visit her. Such, my dear Sir, are
“ the leading features of this interesting case, before it
“ came under your care, and was rendered still more
“ interesting by the subsequent operation. I give you
“ my most cordial permission to make any use of my
“ name you please, in connexion with it; and, indeed,
“ I think it will form a material part of the evidence
“ for its authenticity. You will of course refer to the
“ actual existence of the removed uterus, and the cha-
“ racters which it exhibits, in proof of the treatment

the progress of gestation, and which suddenly passed the os uteri, after the expulsion of the

“ to which it has been submitted. The woman herself is a living evidence of the general fact, of what has been done for her. I was most keenly disappointed, when she refused me permission to examine her the other day. I saw one of her mammae in a state of fine health and plumpness; and she assured me (and I have not the smallest doubt of the fact, from the earnestness of her manner, and the apparent sincerity of her character) that the privileges of matrimony are as gratifying to her, at the present moment, as during any period of her married life. I presume that she may still be in possession of the ovaria. Hoping that this brief communication may be of service to your ulterior object,

“ I am,

“ My dear Sir,

“ Your's, with great regard,

“ D. D. DAVIS.”

In another letter, Dr. Davis states his conviction that the patient's health was not only “ excellent at present, but even better than before her marriage.”

One observation only need be made on this concise and valuable document, with which the industry and zeal of Dr. Davis for the advancement of professional science have prompted him to furnish me; viz. the practical illustration it affords, of an aphorism which has

fœtus. This supposition was strengthened by the patient's recital of the opinions of her medical attendants, which went to prove that they considered it to be a tumour, which had been growing for some time, &c. From the nature of the case, however, little dependence could be placed

been inculcated in a former part of this Essay; viz. "*always to introduce the finger into the vagina, in order to ascertain the state of the pelvic viscera, after the expulsion of the placenta.*" This is a maxim of our best writers on obstetric science, and ought on no account to be omitted. Had it been adopted in the present instance, the affection would have been discovered, and the inverted uterus would have been replaced. No practitioner can be justified in neglecting this most important part of his duty,—involving a precaution, which, however, is unfortunately too frequently overlooked.

I have recently (April 15th, 1818) seen this patient in a state of most excellent health; much better than at any time before or since her marriage. Her mamœ are plump, firm, and healthy; and she has repeatedly confirmed her assertion to Dr. D. on the subject of the venereal æstrum.

I regret to add, that she still obstinately refuses permission to allow an examination of the manner in which the superior extremity of the vagina terminates.

upon this testimony. In this uncertainty, I determined to apply a ligature around the cervix of the tumour, but not to tighten it, if it occasioned pain. This was accordingly effected on April 7th, 1817: the patient complained of no pain, and the ligature was tightened. Still she did *not complain*: but in half an hour afterwards she sent for me in great haste, from the occurrence of a great deal of pain. She had just taken tinct. opii min. xxv; but as I was obliged to leave town for several hours, I judged it most prudent not to wait its effect, but for the present to remove the ligature. *No untoward symptom occurred.*

The events of this morning served to increase my suspicion, and almost to induce a firm conviction that the disease was *inversio uteri*. Under these circumstances, seeing my patient rapidly declining to her inevitable fate; fully assured that she could not exist another month, if something were not effectually tried for her relief; and, well acquainted with the fact, that portions of *uteri*, if not the entire *uterus*, had been

removed successfully, I resolved in my mind to attempt her relief; for although I was well aware that a ligature upon the uterus had proved frequently fatal, yet I was determined to give her the only chance of existence.

It is true, I was not yet *quite* satisfied that the pain did not arise *from spasm*, induced by irritation of the neighbouring viscus, or that the tumour was any other than polypus. Still I had very little doubt of its real nature. Before, however, proceeding further, I requested a consultation with Mr. Oke, of this town, whose professional zeal rendered him an efficient coadjutor, and enabled me to rely with confidence, upon his active co-operation, should this be found necessary. From this time, till its termination, we met frequently; and undertook the joint management of the case.

We met first on the 9th, and after a long consultation, in which we thoroughly canvassed the subject, we coincided in opinion as to the equivocal nature of the case,

but inclined to the belief that it was an inverted uterus. We resolved to consider the case, and to meet again on the 11th, determining, if our opinions remained unchanged, that we would then appoint a day, for the *cautious application of a ligature* : *on the grounds*, that the patient *was daily and rapidly sinking, and that her present state must prove inevitably and speedily fatal*. “*Anceps remedium melius quam nullum* ;” and we judged this to be a case, in which some degree of risk ought to be incurred, rather than tamely suffer our patient to be destroyed, without a single effort to relieve her.

On the 11th we remained of the same opinion, and we fixed on the 13th for the operation.

April 13th, Sunday morning. We met as appointed, and I applied a ligature of very strong silk, as high as possible, upon the neck of the tumour, taking care to avoid including any part of the os uteri, by carrying the silk considerably within its orifice. This ligature, however, partly

from an accidental circumstance, and partly from the desire to proceed with great circumspection, exerted only a very moderate degree of compression upon the tumour. A full dose of tinct. opii was exhibited, and the patient passed a tolerable day, complaining only of a little uneasiness on the sides of the hypogastric region.

14th.. The ligature was tightened considerably: the patient passed an uneasy day, but without much violent pain. She was kept upon a very spare diet, and as quiet as possible. A purgative enema was given in the evening, and *gutt. nigræ min. x. horâ decubitus.* When the injection returned, the patient became alarmed by the canula projecting further than before, from the *os externum.* This arose merely from the descent of the tumour, during the act of evacuating the bowels. Since, however, I found the ligature was rather slackened, I availed myself of the opportunity to draw it a little tighter.

15th. The ligature was tightened this morning: the patient complained of pain,

and sent for me about five o'clock in the afternoon, from the continuance of great suffering. In my absence from home, Mr. Oke visited her for me, and slackened the ligature. I arrived just as this had taken place. I observed the pain occurred at intervals, and *simulated uterine action*; and I felt assured that it arose from the spasmodic contractions of that organ, which had been irritated by the application of the ligature, and not from any inflammatory action. The opiate was now repeated: the pain remitted, and late in the evening she was better, though not free from uneasiness. It was agreed to defer tightening the ligature till to-morrow; I directed some aperient medicine to be taken immediately; and *after its operation*, the opiate draught to be repeated, if necessary.

16th. She has passed a restless, sleepless night, with much pain; has had no evacuation from the bowels; the ligature is not *very slack*, and we agreed to defer tightening it till to-morrow. Repeat the cathartic mixture.

Evening. The mixture has operated, and she is much easier, has just had some refreshing sleep ; the ligature is more slack. Repeat the opiate draught at bed-time.

17th. She has passed a restless painful night ; she complains of tenderness on the left side of the hypogastric region ; her pulse is somewhat quickened, but there is no tension of the abdomen ; the tenderness is by no means considerable, and the increased action of the arterial system appears to be dependent rather on nervous irritability, than on the existence of inflammatory action. Under these circumstances I acceded, somewhat reluctantly, to the proposition of Mr. Oke, to remove the canula entirely, leaving the ligature perfectly loose around the neck of the tumour. Feeling, however, that my ultimate object would not be disappointed by this measure, we determined on doing so. An opiate enema was exhibited, and she was relieved from pain.

Evening, 11 p. m. A cathartic enema

has been administered, and produced a good effect. She has just taken the anodyne draught. *The pain and tenderness have entirely subsided*: considerable fætor is present.

18th. All untoward symptoms have vanished. Confirmed in our opinion of the practicability of removing the tumour, and of the nature of the disturbance, as arising rather from *spasm and uterine irritation, than from visceral inflammation*; and pleased with the ephemeral duration of suspicious symptoms, we agreed to tighten the ligature, and give an opiate enema, presently afterwards. She bore this operation tolerably well; complained, during the day, of a little pain, *but not violent*; has had one motion since the morning, and repeats the anodyne draught at bed-time.

19th. Symptoms as yesterday. Our patient has had a natural motion this morning, and still complains of pain, but not more severe than at the last report. The ligature was again tightened, and the medical treatment of yesterday repeated.

20th. Much the same: tightened the ligature. In the evening of this day, she complained of pain, restlessness, and a general feeling of indisposition: she has had no motion—is irritable, and impatient. Repeat the anodyne draught at bed-time, and a cathartic powder to-morrow morning.

21st. Symptoms as yesterday.

22nd. Much the same: the ligature was tightened each day—the opiates were repeated, and to-morrow morning she again takes the aperient powder.

23rd. Symptoms as before.

24th. Much the same. The ligature is daily and considerably tightened: there is much fa^ror, and a great deal of pain at intervals, *arising apparently from uterine action*: there neither is, nor ever has been, the smallest tenderness, (except on the 17th) or tension of the abdomen. She is very irritable, but this is her natural temperament, and great allowance is to be made for her on this ground: she takes an opiate draught twice in the day.

26th. Much the same. The ligature has been daily tightened: the opiate draughts, with occasional enemata, have been repeated. The patient is *excessively irritable*, but has certainly suffered less pain in the last two days, than in those which immediately preceded. There is no tension of the bowels, nor a single bad symptom; yet perhaps the quantum of pain, and the slowness of our progress, are somewhat greater than is usual, even in those cases of polypi, the removal of which is said to be sometimes attended with violent symptoms. This remark is introduced for the purpose of keeping alive the attention of the reader, to the parallel which will be presently drawn between the symptoms arising occasionally from the ligature of a polypus, and those in the present instance, from a similar cause acting upon an inverted uterus. As her pulse is rather feeble, and the discharge considerable, with no inflammatory symptoms present, she is allowed a little malt liquor, and wine and water.

28th. Report as before; but there has

been rather less pain in the last forty-eight hours; and her pulse is improved.

30th. Much the same as before, only that she has decidedly less and less pain: the *fætor* is very much increased, together with a putrid sanguous discharge. For the last week she has been using injections of weak camomile infusion twice a day: her general health is certainly improved.

May 2d. Our patient is improving; the *fætor* of the discharge is almost intolerable; she is *most inconceivably irritable, but certainly in better health than before the operation.*

4th. There has been no pain since the last report, and no other morbid symptom. Yet the tumour is not wholly detached; and for the last two days, the ligature has been tightened, both morning and evening, and that too very considerably.

6th. No pain since the last report. Our patient's health is a little improving.

When the ligature was tightened this evening, the tumour became detached, and I found to my no small satisfaction, that it was as I had believed, an inverted uterus.

At this time, before its maceration in water, and subsequent hardening in proof spirit, the tumour was about the size of the human heart. The partial adhesion of its surfaces, where they had been acted on by the ligature, renders the demonstration of the regular uterine interior somewhat confused : there is, however, a defined cavity in its centre, lined with a membrane, which is clearly peritoneum, on the sides of which may be distinctly traced the broad ligaments. Its external surface is rough and shaggy. The mouths of some considerable arteries are perceptible at its base ; as also several venal sinuses. On making an incision into its substance, the muscularity of its structure is clearly perceptible.

A subsequent and more minute examination, has detected many orifices of vessels upon its external surface, through which bristles can be passed, to the supe-

rior part of the tumour, and to the trunks of the veins. Through two other apertures, bristles can be passed into the Fallopian tubes*. Below and to the right of the

7th. Our patient is going on well; she has passed a comfortable night; she has had scarcely any discharge, and that little has been of mucus only. There is now less discharge than at any time since her delivery, and she is cheerful.

8th. Our patient complains to-day of great faintness, palpitation of the heart, tendency to perspiration, and depression of spirits. These symptoms may perhaps be partly ascribed to the warmth of the day. She has no pain or tenderness in the hypogastric region, and no discharge; her appetite is bad; she is directed to take a draught of bark with ammonia, twice a day; and two table-spoonsful of a warm mixture, occasionally, when most annoyed by faintness.

As to abortion, you will probably find the following passage interesting, and will be glad to see

* For a further description of the tumour, see
plates. Out of necessity of this subject, the

9th. Much better than yesterday, and gaining strength.

10th. Improving; she dislikes the bark, and is ordered five grains of the pil. ferri *et* myrrha, three times a day; she is also allowed half a pint of Port wine daily.

15th. The dose of the pil. ferri *et* myrrha has been gradually increased; the patient improves daily; she looks better; she has had no discharge since the 8th; she eats, drinks, and sleeps well; her strength is improving; her head-ache, heretofore for a long period so distressing to her, almost gone; pulse to-day when sitting up only 80; and the palpitation of the heart greatly subsided.

From this time she became daily convalescent, and in five weeks after the removal of the tumour, she returned to town perfectly well*.

* The patient has recently informed me, that at different periods, with the interval of about a month, she has had a pale-coloured discharge from the vagina,

When the extreme exhaustion, and irritable system of this patient are considered, the successful termination of the operation appears so encouraging, as to induce me to offer a few remarks on the general subject, with the intention of exciting the attention of the profession, to the possibility of relieving a disease, which perhaps is more frequently met with, than is commonly supposed, and which is generally left to the hopeless misery of a wretched life, and a too lingering dissolution.

I shall throw together these observations, under the heads of the uncertainty of the diagnosis in the present state of our knowledge; of the consequences of inversio uteri; of the general prognosis, and means of relief; of the extirpation of the uterus; and of the consequences of the operation, contrasted with those arising from the application of a ligature upon a polypus, under certain circumstances.

not continuing any time, nor requiring the use of a napkin, but just enough to be visible upon her linen, and to leave there a stain, about as large as a half crown piece.

§. I. UNCERTAINTY OF DIAGNOSIS.

It is generally remarked, that *inversio uteri* may be distinguished from polypus of that organ, by the *os uteri* not encircling the former tumour in cases of complete inversion; and by the impossibility of passing the finger around the neck of the tumour, between it and the *os uteri*, where the inversion has been only partial; by the form of the tumour, polypus being broad at its base, and attached by a narrow peduncle, while the inverted uterus is broader above than below; by the insensibility of the tumour in the one case, and by its extreme sensibility in the other; by the comparative fixity of the one tumour, and the extensive sphere of motion of the other; by the rough and fungous surface of inversio, contrasted with the smooth and polished circumference of polypus; and by the previous history of the patient's disease.

But it is clear that these diagnostics are liable to a great degree of uncertainty, as will appear from the contradictory statements of various authors to be presently

adduced; and from the consideration, that the *first and second rules are chiefly applicable to very recent cases of inversion; or to those instances in which partial inversion has taken place, but has not carried down the fundus of the uterus in any great degree through the os uteri;*—from the fact, that in the case just related, the *neck of the tumour was certainly smaller than its base, and the finger could be freely passed as far as it could reach within the os uteri, and around the inverted portion of the uterus;* from the *difficulty of distinguishing obscure sensibility of the tumour itself, from the sensibility of neighbouring organs, roused into feeling, by the irritation of examining the parts;* from the *vagueness of the diagnostic arising out of the comparative fixedness of inversio and polypus, which however must depend so entirely on the size of the body of the tumour, as well as the broadness of its stem, where it is attached to the uterus;*—from the fact, that according to the *length of time which has elapsed, since the inversion, and from other circumstances, its surface will be rough and fungous-like, or smooth and polished;* from the *possibility that the same*

phenomena may have attended the *history* of each form of disease; and from the fact that *polypi*, and *inversion of the uterus*, have been repeatedly and interchangeably confounded, one with another.

These truths will strikingly appear, from the consideration of the following authorities; and if it should be shewn, that in the present state of our knowledge, we are not possessed of a *sufficient guide* accurately to determine the nature of these diseases, it will be the more important to inquire how far they will admit of a *similar treatment*; and the degree of caution necessary in advising an operation. Under such circumstances, I trust I shall not be blamed for multiplying quotations from all the best authorities on the subject.

Heberden speaks of *polypus* as being “a fleshy substance, like a pear, *the body of it being much larger than the stalk* *.”

* Heberden's *Commentaries*, p. 478.

Guillemeau does not *particularly* describe the Renversement de la matrice in its chronic stage, but says generally, that the disease may be known, “*lors le fond* “*s'apparoit rond en bas, et fort poly, sans* “*qu'il y ait aucun trou ny orifice. Telle* “*maladie se reconnaît d'autant plus,* “*qu'au commencement, il sort du sang* “*par la matrice*.*”

Smellie informs us that no right judgment could be formed of a disease to which he was called, “*because the tumour filled up the whole vagina, and the os internum could not be felt*†:” thus indicating that his principle of diagnosis rested on the *relative situation of the os uteri.*

Heister observes on this subject: “*Si ad molarum figuram et magnitudinem res plexeris, mirificam earundem differentiam*

* Guillemeau, *De la Grossesse*, p. 449.

† Smellie's *Midwifery*, Vol. II. p. 92.

“ existere cognosces. Quædam earum nus-
 “ quam cum utero cohærescere deprehendun-
 “ tur: aliæ per unam alteramque venam,
 “ aut fibram carneam, cum eodem conjunc-
 “ tæ sunt: aliæ denique firmiter admodum
 “ ipsi adhærescunt*.”

This extract goes far to prove the little dependence that can be placed on the accuracy of the diagnosis arising from *the size of the peduncle of the tumour*—and consequently from its *comparatively extensive or limited sphere of motion*; which will ever be precisely commensurate, with *the extent of its attachment to the uterus*.

Again observes Heister, “ Distingui
 “ vulgo solet uterus non inversus, ab in-
 “ verso, ut modo dictum est, “ *ex ore*
 “ *uteri*, quod se in non inverso, sicut in
 “ Tab. xxxiv, fig. 2, lit. C. exhibuimus,
 “ repræsentat: eoque etiam vulgo, a va-
 “ ginæ prolapsu, imo et a fungis vaginæ
 “ distingui solet†.”

* Heisteri Chirurgia, Vol. II. p. 1082.

† Ibid. p. 1085.

" Altera procidentiae species est, quando
 " *uterus prolapsus ad instar sacculij inversus*,
 " ita ut interior ejus facies fiat exterior,
 " esse animadvertisetur, *uteri ore sive orifi-*
 " *cio tunc, utpote intus in vagina latente*,
 " non conspicuo*."

Clarke remarks that, " An examination
 " being made, a tumour is found either in
 " the vagina, or hanging out of the ex-
 " ternal parts. Such a tumour may be
 " mistaken for a polypus: but in the *lat-*
 " *ter disease, the os uteri encircles the tu-*
 " *mour: in inversion of the uterus, the os*
 " *uteri forms a part of the tumour itself.*—
 " Moreover the *inverted uterus is sensible*;
 " *polypus tumours, on the contrary, are void*
 " *of feeling.*."

Again, " Polypus of the uterus is an
 " *insensible tumour*, attached to the inter-
 " *nal part of this viscus, by a small neck.*
 " *These tumours are various as to their*
 " *appearance, shape, and degree of hard-*

* Heisteri Chirurgia, Vol. II. p. 1087.

“ ness, In polypus of the uterus, the
 “ neck of the tumour, which is surrounded
 “ by the os uteri, is contracted: it spreads
 “ out below, because it has sufficient space
 “ for enlargement in the yielding vagina.”

And again, “ The tumour (polypus) is
 “ generally of a rounded form, but some-
 “ times it is elongated, or flattened.”

“ The *History of the Case* from its com-
 “ mencement, and the *insensibility of poly-
 “ pus*, will distinguish it from *inversio
 “ uteri*.”

Mauriceau writes, “ Ce sont (polypes)
 “ des excroissances de chair fongueuses,
 “ attachées à la substance intérieure, de la
 “ matrice, que l'on sent quelquefois se
 “ presenter, à l'embouchure de l'orifice in-
 “ terne, d'une grosseur fort considérable,
 “ et qui sont extirpables par la ligature,

* C. M. Clarke's Diseases of Females, Vol. I. p. 145,
 220, &c.

“ qu'on y peut faire, quand leur base est
“ petite*.”

Puzos describes polypus under his seconde espèce d'ulcère fongueuse de la matrice, and adds, “ Pour bien reconnoître cette maladie, il faut entrer dans le vagin, porter son doigt à côté de la tête du champignon, et l'avancer jusqu'à l'orifice du col de la matrice. Si l'on trouve cet orifice ouvert, mais mince à son ordinaire,—que l'on sente un corps qui la traverse, et autour duquel ou puisse tourner le doigt, sans qu'on y remarque adhérence, quelque volume qu'ait ce corps étranger, qui est logé dans le vagin, ou doit conclure, que ce n'est qu'un champignon, dont on fera l'extraction avec succès, &c. †.”

Baillie observes, that “ when the inver-

* Mauriceau, Dernières Observations, Tom. II.
p. 20.

† Puzos, Pratique des Accouchemens, p. 267.

“ sion is complete, it can be ascertained
“ by an examination of the tumour*.”

Again, “ Polypi grow from some part
“ of the cavity of the uterus, by a *narrow*
“ *neck or peduncle*. They are generally
“ round in their shape, and consist of a
“ firm substance†.”

Dr. Denman, on the contrary, men-
tions a case (Case 5), in which the *stem of*
the polypus was extremely large, so that the
os uteri was fully dilated‡.”

A writer in the *Encyclopédie Métho-
dique*, speaking of polypus, adds, “ Elle
“ affecte en quelque sorte, une *forme py-*

* Baillie's *Morbid Anatomy*, p. 391.

† Baillie's *Engravings of Morb. Anat.* p. 191. The
beautiful Works of Dr. Wm. Hunter on the Gravid
Uterus; Dr. Denman's Plates of Midwifery, Plates 12
and 17; and Hogben's *Obstetric Studies*, may be refer-
red to, as exhibiting the different appearances of this
organ in its healthy and inverted state.

‡ Denman's *Midwifery*, Vol. I. p. 100.

“ *ramidale*: sa base acquiert quelquefois
 “ une étendue très considérable, tandis que
 “ sa partie supérieure est toujours retrécie,
 “ et n’adhére dans quelque cas au viscére,
 “ ou elle a été formée, que par une petite
 “ surface*.”

Again, “ On appelle *renversement incomplet* de l’utérus, une tumeur située
 “ dans le vagin, ayant une forme demi-sphérique, presque égale dans sa surface,
 “ et surmontée par l’orifice de la matrice,
 “ connue par une espèce de bourrelet, autour
 “ duquel il est aisè, de promener un doigt,
 “ soit du côté de la tumeur, soit du côté du
 “ vagin†.”

Maygrier remarks that, “ En portant
 “ un doigt dans l’interieur du vagin, on
 “ reconnaît le premier, (renversement incomplet) à la présence d’une tumeur
 “ qui a la forme d’un segment de sphère, et
 “ qui n’admet pas de rotation. Il faut faire attention
 “ à ne pas confondre ce renversement avec le *polype de la matrice*.
 “ **Encyclopédie Méthodique.** Article *Polype de la Matrice.*

† Ibid. Article *Renversement de la Matrice.*

“ qui est entourée par le col de la matrice :—
 “ la main opposée, placée sur l’abdomen
 “ sent un vide à l’endroit où se trouve
 “ ordinairement la matrice, quelques in-
 “ stans, après l’accouchement*.” But it
 is evident that this description is by no
 means applicable to the chronic stage of
 the disease, and refers only to the *primary
 symptoms*.

Delpech observes that, “ Le diagnostic
 “ n’est pas toujours exempt de difficultés :
 “ il est aisément dans quelques cas, de s’en lais-
 “ ser imposer, et de confondre le renverse-
 “ ment de la matrice, avec telle autre
 “ affection qui présente quelques ressem-
 “ blances :—par exemple, un polype dé-
 “ veloppé, dans la cavité de l’utérus, et
 “ adhèrent à son fond, distend les parois
 “ de l’organe, dilate l’orifice, et se présente
 “ à cette même ouverture†.”

* Maygrier, *Traité des Accouchemens*, Vol. II. p. 256,
 et seq.

† Delpech, *Précis des Maladies Chirurgicales*,
 Tom. II. p. 576.

Again, “ Lorsque la dépression du fond “ est augmenté au point d’engager cette “ partie dans l’orifice, une tumeur sphérique “ occupe cette ouverture, et se trouve en- “ tièrement libre, ou bien plus ou moins res- “ serrée. Dans le premier Cas le doigt peut “ penetrer entre le contour de l’orifice, et la “ tumeur qui l’occupe, et reconnaître, que la “ base de cette dernière, est beaucoup plus “ volumineuse, que la partie qui se montre au “ dehors.”

“ Ce même symptôme peut être égale- “ ment vérifié, lorsque le contour de l’ori- “ fice agit à la manière d’une ligature sur “ le fond de l’utérus renversé : mais alors “ le doigt ne peut ni penetrer, ni circuler, “ entre la tumeur et l’ouverture. Ce cas “ pourrait d’autant plus facilement être “ confondu, avec les symptômes d’un po- “ lype utérin, que l’observation a demon- “tré, que ces tumeurs peuvent se develop- “ per, pendant le cours de la gestation :— “ qu’elles peuvent se montrer à l’orifice de la “ matrice, après l’accouchement :— et que “ leurs poids peut aisément, déterminer “ alors un renversement incomplet de l’or-

" gane. Mais si l'on fait attention que les
 " polypes ont *ordinairement, une pédicule*
 " étroite;—que lorsqu' une tumeur de cette
 " espèce, entraîne la paroi correspon-
 " dante de l'utérus, elle doit nécessaire-
 " ment conduire son propre pédicule a
 " l'orifice; que par consequent, il doit y
 " avoir une grande différence entre le
 " volume des parties que cette ouverture
 " embrasse, et celui de la portion de tu-
 " meur qui fait saillie au dehors:—enfin,
 " que *les polypes n'ont qu'une sensibilité très*
 " *obscure*, et nullement comparable à celle
 " dont la matrice jouit; on verra, qu'on
 " peut distinguer de toute autre affection,
 " ce degrès de renversement pur et sim-
 " ple*."

And again the same author says, " La
 " tumeur (polype) est *sphérique, dure,*
 " *lisse, et nullement spongieuse*: quand
 " elle est devenue considérable *elle peut*
 " égaler le volume que formerait *le fond*

* *Précis des Maladies Chirurgicales, par Delpech.*
 Tome II. p. 586.

“ de la matrice renversée ; le doigt circule
 “ entre elle, et l’orifice qui l’embrasse ; et
 “ cependant, le corps, et le fond de l’uté-
 “ rus, considérés par la region hypogas-
 “ trique, présentent toute la régularité
 “ qui leur est naturelle*.”

Cruveilhier writes thus:— “ L’analogie
 “ est si grande, entre *le tissu de la matrice*,
 “ *et celui des polypes*, que dans le cas des
 “ **POLYPES NON PEDICULÉES**, il est im-
 “ possible de distinguer, ce qui appartient
 “ aux polypes, de ce qui appartient à l’uté-
 “ rus†.”

Hamilton remarks, that, “ Their exist-
 “ ence (polypi) is discovered by a careful
 “ inquiry into the circumstances of the
 “ case, and by an examination of the
 “ parts : sometimes *their basis is very consi-*
 “ *derable*, though they generally adhere by
 “ a small neck‡.”

* *Précis des Maladies Chirurgicales*, par Delpech.
 Tom. III. p. 399—400.

† *Cruveilhier, Anatomie Pathologique*, Tome I.
 p. 395.

‡ *Hamilton’s Outlines*, p. 113.

Gardien observes, “ On pourrait prendre “ *la tumeur pour un polype*, parvenue à son “ second état, et qui commencerait à s’engager dans l’orifice, et à en écarter les “ bords. On pourrait aussi prendre pour “ *un renversement, un polype qui aurait existé* “ *en même temps que l’enfant*; et qui tend-“ rait à sortir. *L’erreur est d’autant plus* “ *facile, que ces deux indispositions, ont la* “ *même forme* et causent les mêmes incom-“ modités:—on les distingue, en ce que “ *le polype est indolent, et ne peut être re-* “ *duit, au lieu que la tumeur formée par le* “ *renversement incomplet de la matrice,* “ *est très sensible, et susceptible de reduc-* “ *tion**.”

And again, the history of the case forms but a very uncertain guide to the practitioner; for, “ *un polype qui compliquerait* “ *la grossesse, peut s’échapper après la déli-* “ *vrance, et en imposer pour un renversement* “ *complet de la matrice.* En effet, l’une et

* Gardien, *Traité des Accouchemens, Tome III.* p. 316.

" l'autre tumeur ont beaucoup de ressem-
 " blance *par leur forme*, sortent à travers
 " l' orifice, et l'on peut promener le doigt au-
 " tour du pédicule : l' une et l' autre peuvent
 " être repoussées dans le vagin, et foarnissent
 " des écoulemens*."

And of the completely chronic stage of the disease, the same author remarks : " *Il*
 " *seroit bien* plus difficile de distinguer une
 " matrice complètement renversée depuis
 " plusieurs années, d'un polype. Le Pro-
 " fesseur Baudelocque a vu plusieurs fem-
 " mes sujettes à cet accident, depuis
 " nombre d'années, et chez toutes, la ma-
 " trice avoit été prise pour un polype, &c.
 " &c."

But he adds afterwards, " Le pédicule
 " du polype est *généralement*, plus long et
 " plus grêle que celui de la tumeur formée
 " *par la matrice*, qui est toujours plus gros,
 " et plus court. Dans l'un et l'autre cas,

* Gardien, *Traité des Accouchemens*, tome 3me. p. 319.

“ l'orifice uterin forme à la vérité une sorte
 “ de gaîne au pédicule de la tumeur : mais
 “ ce bourrelet est toujours peu saillant, si
 “ la matrice est renversée : *le doigt ne peut*
 “ guère pénétrer sous cette gaîne, au-delà
 “ de la profondeur de trois à quatre lignes ;
 “ il parvient au contraire à une très grande
 “ profondeur, si la pédicule appartient à
 “ un polype. Dans le cas de polype, on
 “ peut le plus souvent sentir la matrice au-
 “ dessus du pubis, avec la main qui palpe
 “ l'hypogastre, si la femme n'a pas trop
 “ d'embonpoint*.”

Denman observes, on this subject, “ Po-
 “ lypi are of different forms and sizes.
 “ *Some of them hang by a small pedicle,*
 “ *and others have a broad basis†.*”

Again, “ It has been mentioned, as a
 “ general rule, that we ought not to pass
 “ the ligature round a polypus, *unless we*
 “ *can feel the stem ; but in cases of extreme*

* Gardien, tome 3me. p. 320, 321.

† Denman's Midwifery, vol. i. p. 89.

“ danger, this rule must be disregarded.
 “ Should a *polypus* arise from the substance
 “ of the part, with a basis as large, or larger,
 “ than the excrescence, the ligature cannot
 “ be fixed, &c. * ”

Denman mentions a case of *polypus*, not
 of a large size, but with a very thick stem,
 “ and when I passed my finger to the ex-
 tremity of it, within the *os uteri*, I found
 “ as it were, the bottom of the cavity of the
 “ uterus, &c. † ”

In defining chronic inversion of the
 uterus, he observes further, “ It seems as
 “ if the cervix of the uterus continued to
 “ act, or had soon acted in such a manner,
 “ as to gird the inverted uterus so firmly, that
 “ it could not be moved; yet the inverted
 “ surfaces, though lying in contact, have not
 “ been found coalesced together, so as to form
 “ one mass, as has been surmised ‡.”

* Denman's Midwifery, vol. i. p. 93.

† Ibid. p. 104.

‡ Ibid. vol. ii. p. 358.

Samuel Cooper thus writes: " *Polypi of the uterus are always shaped like a pear, and have a thin pedicle.* The *inversio uteri* is commonly the consequence of a difficult labour, and hence is easily discriminated from *polypus* by its *occasional cause*. While the inverted uterus lies in the *vagina*, its *shape is broad above, and narrow below, whereas the polypus is thin above, and broad below*. Hence, in cases of very large *polypi* in the *vagina*, the *os uteri is but little dilated: while it is extremely distended by the incomplete descent of the inverted uterus itself**.

" In short, the *pedicle of a polypus is always narrow; the tumour is not very sensible, and is irreducible; whereas the uterus forms a semi-spherical swelling, sometimes a little oblong, but always broader above than below. It is very sensible, and may be easily reduced* †."

* Samuel Cooper's *Surgical Dictionary*, article, *Polypus of the Uterus*.

† *Ibid. Article, Inversion of the Uterus.*

The accurate Burns thus speaks of polypus: " We must have recourse to examination, by which we discover that the uterus is enlarged, *its mouth open*, and a *firm, but generally moveable body* within *it*. If there be an *union between the os uteri and the tumour, or if they be in intimate contact*, polypus may pass for *inversio uteri*. Here I may only remark that the womb is *sensible*, but polypus is *insensible* to the touch or to irritation: but it should be recollected, that *if the polypus be moved, sensation can be produced by the effect on the womb*.

" The enlargement is generally greatest at the *farthest extremity of the tumour*, and least near the womb, so that a kind of *pedicle is formed*: but if the *membrane* of the uterus be affected to a *considerable extent*, and especially if the substance of the uterus be diseased, *then the base or the attachment of the polypus is broad*.*"

" Inversion is to be distinguished from

* Burns's Midwifery, p. 77, 78.

“ polypus by examination, and finding the
 “ os uteri embracing the polypus. The his-
 “ tory will likewise assist in the diagno-
 “ sis*.”

Nauche remarks, “ La tumeur formée
 “ par le renversement incomplet, est d'une
 “ forme *allongée, cylindroïde*. Le col de
 “ l'utérus forme à sa base, *une sorte de col-*
 “ *let*, autour duquel, on peut promener le
 “ doigt, tant du côté de la tumeur que du
 “ côté du vagin†.”

“ L'on a confondu quelquefois les po-
 “ lypes de l'utérus, avec le renversement
 “ chronique et incomplet de cet organe.
 “ Ces maladies, ont en effet, dans quel-
 “ ques cas, beaucoup de ressemblance
 “ entre elles : on parvient cependant à les
 “ distinguer, en portant quelque attention
 “ dans leur examen. Les tumeurs fibreuses,
 “ *sont peu sensibles au toucher*; elles sont
 “ supportées par une *pédicule grêle, allon-*

* Burns's Midwifery, p. 384.

† Nauche, sur Les Maladies de L'Utérus, p. 119.

“ gée : leur mouvemens sont libres, et elles
 “ n'ont de connexion, qu' avec une petite sur-
 “ face de l'utérus : le col de cet organe leur
 “ sert de gâine ; l'on peut promener le doigt
 “ autour de son orifice, et l'introduire même,
 “ entre ses parois et la tumeur. Dans le
 “ renversement, on ne trouve point l'uté-
 “ rus dans sa position naturelle. La tu-
 “ meur formée par le deplacement, con-
 “ serve un certain degré de sensibilité : elle
 “ est plus volumineuse, du côté de l'utérus,
 “ qu'à son autre extrémité : elle n'est pas
 “ susceptible de reduction, ni par les moy-
 “ ens de l'art, ni spontanément *.”

Again, with respect to the history of the
 case : “ *L'observation démontre que cette
 affection (polype) n'empêche pas toujours
 la conception, même, lorsque la tumeur
 s'est développée dans la cavité du corps de
 la matrice : et quelquefois, cette espèce
 de corps étranger, n'empêche pas la gros-
 sesse de parcourir librement ses périodes, et*

* Nauche, sur les Maladies de L'Utérus, p. 120,
121.

“ de se terminer heureusement : mais il se
 “ montre après l’expulsion du produit de la
 “ conception, tandis qu’il a pu rester ignoré
 “ jusqu-là *.”

Once more, “ Un polype uterin lors-
 “ qu’on n’est pas éclairé par les circon-
 “ stances commémoratives, peut donc en
 “ imposer pour une inversion de la ma-
 “ trice, d’autant plus qu’il *produit comme*
 “ *elle une masse rouge, fongueuse, pyri-*
 “ *forme, et saignante, ainsi que des tiraille-*
 “ *mens douleureux dans la région lom-*
 “ *baire. Le diagnostic est alors toujours*
 “ *difficile, à moins que l’excroissance n’ait*
 “ *acquis beaucoup de volume, cas dans*
 “ *lequel il n’y a pas de donte, qu’elle ne soit*
 “ *de nature polypeuse, puisque la matrice*
 “ *ne saurait, en se retournant, faire une*
 “ *saillie aussi considérable, sans renverser*
 “ *aussi et effacer le col, dont le doigt recon-*
 “ *nait au contraire, la présence dans le cas*
 “ *en question †.*”

* Delpech, Tome III. p. 396.

† Dictionnaire des Sciences Medicales, Tome
 XXII. Article Hysteroptose, §. Du renversement
 de la Matrice, p. 289, 290.

Dr. Haighton relies, for a diagnosis, upon the history of the case, and the sensibility of the tumour principally: he alludes pointedly to the fact that polypi have *frequently large stems**.

“ Lors que le polype a forcé la matrice à s’ouvrir, il ne tarde guére à franchir son orifice, par l’effort expulsive de ce même viscère; il pend alors dans le vagin, par un pédicule plus ou moins gros, selon la nature de cette excroissance, et le temps qu’il y a, qu’elle s’est formée. En général, la consistance et le volume du pédicule dépendent de l’état primitif de la tumeur; c’est à dire, que si dès le principe elle a été *molle*, son pédicule reste *mol et assez long*; mais qu’il est au *contraire, gros, dur et court*, si la tumeur dans son origine, a été *ferme et solide*.

“ Il faut observer, qu’on ne peut pas toujours passer le doigt assez avant pour

* Haighton’s MS. Lectures, 1809.

“atteindre l’orifice de la matrice, ni même
“toucher le pédicule de la tumeur ; cela ne
“se peut qu’autant que le polype est petit
“on de moyenne grosseur.”

In such cases, the following are given as directions for establishing the diagnosis : viz.

“1°. Avoir recours au Taxis, pour voir
“si la tumeur ne peut se réduire : 2°. Es-
“sayer s’il est possible de faire marcher le
“doigt autour de cette masse ; pour s’as-
“surer, s’il n’adhére en aucun endroit :
“3°. Enfin, chercher au bas de la tumeur,
“s’il ne trouve pas l’orifice de la matrice ;
“en observant néanmoins que certains po-
“lypes ont quelquefois à leur base, des
“enfractuosités assez profondes, pour être
“prises pour l’orifice même de la ma-
“trice*.”

“La consistance de cette tumeur (ren-

* Herbiniaux, sur les Accouchemens Laborieux, et
sur les Polypes de la Matrice, Tom. II. p. 32, 33.

“ versement de la matrice) étoit charnue :
 “ elle faisoit ressort sur la pression du
 “ doigt ; du reste, elle étoit lisse dans
 “ toute sa circonference, sans être néan-
 “ moins indolente au tact.

“ Si la tumeur qu'on trouve dans le
 “ vagin étoit si volumineuse qu'elle rem-
 “ plit exactement ce conduit, ce qui forme
 “ alors un obstacle à l'introduction du
 “ doigt jusqu'à l'orifice de la matrice, on
 “ peut croire hardiment, que la tumeur est
 “ polypeuse, et non un renversement in-
 “ complet de la matrice, puisque le ren-
 “ versement ne forme jamais qu'une tu-
 “ meur médiocre, incapable de remplir le
 “ vagin*.”

“ Je touchai la malade ; cette tumeur
 “ que je pris pour un polype se présentoit
 “ dans l'orifice de la matrice, de la gros-
 “ seur d'un orange ordinaire ; je tournai le
 “ doigt à l'entour ; je reconnus qu'elle étoit
 “ libre de toutes parts ; plus grosse en bas

* Herbiniaux, sur les Accouchemens Laborieux, et
 sur les Polypes de la Matrice, Tome II. p. 61, 62.

“ qu'en haut; mais que le pédicule en
 “ étoit fort court, *puisque je ne pouvais la*
 “ *faire mouvoir dans la matrice.* Sa con-
 “ sistance me parut molle, et la superficie,
 “ très inégale*.”

Mons. Herbiniaux relates a case, in which he supposed the neck of the polypus to be about four inches and a half in circumference. “ Je reconnus,” he continues, “ que ce polype avoit réellement le volume que je lui ai assigné, et que son pédicule sortoit de l'orifice de la matrice à-peu- près de la grosseur du bras d'un homme.”

Again, after its removal, “ Je mésurai le volume de ce polype: il avoit 13 pouces de circonférence à son ventre, 6 et demi à son pédicule, et 7 de longueur depuis sa base, jusqu'à l'endroit de la scission †.”

* Herbiniaux, sur les Accouchemens Laborieux, et sur les Polypes de la Matrice, Tome II. p. 41.

† Ibid. p. 163. 171, 172.

Lastly, Capuron observes, “ En outre, “ la tumeur que présente la matrice ren-“ versée, est *sensible et susceptible de ré-“ duction, au moins quand elle est récente,* “ tandis que l’excroissance polypeuse est “ indolente et irréductible. *C'est même “ d'après ce signe qu'on peut distinguer le “ renversement de matrice, d'avec le polype “ qui aurait compliqué la grossesse, et qui “ viendroit à s'échapper dans le vagin, après “ l'accouchement, on la délivrance*.*”

“ Enfin le cas le plus épineux seroit “ celui où le renversement complet, auroit “ duré depuis plusieurs années, comme “ Baudelocque dit l’avoir rencontré chez “ plusieurs femmes, dont la matrice avoit “ été prise pour un polype. Ce qui peut “ causer alors la méprise, dit l'auteur, c'est “ que cet organe rentre dans le bassin après “ quelque temps, pèse moins sur le péri-“ née, perd insensiblement de son volume, “ et se réduit même au-dessous de celui “ qu'il auroit, s'il n'étoit pas renversé:—il

*Capuron, *Traité des Maladies des Femmes*, p. 197.

" diminue aussi de longueur, et semble
 " rentrer dans son col à mesure que le ren-
 " versement s'invétère: le col embrasse
 " plus exactement le pédicule de la tu-
 " meur: il devient plus mou, plus flasque:
 " sa cavité offre plus de profondeur, et le
 " doigt y pénètre plus aisément: joint à
 " cela, que la tumeur perd beaucoup de sa
 " sensibilité, quand elle reste longtemps
 " sans être réduite. Cependant on peut
 " encore alors se mettre à l'abri de l'erreur,
 " si l'on redouble d'attention; car le pédi-
 " cule du polype, toujours plus long et plus
 " grêle, est entouré d'un bourrelet plus
 " saillant que la matrice renversée. Dans
 " le premier cas, le doigt qui parcourt la
 " tumeur de la base au sommet, trouve une
 " gaîne, ou un sillon plus profond que
 " dans le dernier. Si c'est un polype, la
 " main qui palpe l'hypogastre, ressent en-
 " core la matrice au-dessus du pubis, à
 " moins que la femme, n'ait trop d'emon-
 " point, ou que le fond de cet organe n'ait
 " été entraîné par la tumeur, dont la pé-
 " dicule s'y implante: au contraire lors-
 " que le renversement complet dure depuis
 " nombre d'années, on ne découvre rien

“ dans l'hypogastre, quoique la femme soit,
 “ pour l'ordinaire, très-maigre. On ne
 “ sent que l'épaisseur des parois abdomi-
 “ nales, entre le doigt indicateur d'une
 “ main, et la face palmaire de l'autre*.”

On reviewing the foregoing testimonies, we shall be induced to conclude that it is *always difficult*, and *sometimes impossible*, with our present knowledge, to distinguish *partial and chronic inversion of the uterus from polypus*: since, in both diseases, the *os uteri* will be found encircling the summit of the tumour, and in either case the finger may be passed readily around it. And if in order to remove this uncertainty, the entire hand be introduced into the *vagina*, so as to allow the finger to pass by the side of the tumour to the extremity of the space remaining between it and the *os uteri*; and if we find that the finger *soon arrives* at this point, it will be impossible to ascertain whether it rests against a por-

* Capuron, *Traité des Maladies des Femmes*, p. 503,
 504.

tion of uterus which has been inverted in the *usual way*, or by the *long-continued dragging of polypus upon its fundus*. And if under these embarrassing circumstances, we call to our assistance our ideas concerning the *form of polypus*, its *enlarged base, and narrow peduncle*, we must also recollect the abundant evidence to prove, that the neck of such a tumour is often as large, and sometimes larger, than its inferior extremity: and we shall still be left in inexplicable uncertainty.

But shall we not find some more infallible guide, in those other characteristics, which have been given as certain diagnostics? On the contrary, we shall always find it difficult to distinguish between the sensibility of the tumour, and *sensation* occurring in neighbouring viscera, which are irritated by the process of examination,— while, too, it must be remembered, that the sensibility of the inverted uterus is greatly diminished in its chronic stage, and that the sensibility of polypus may be increased by the presence of inflammatory action: we shall ascertain that the degree of appa-

rent fixedness of the tumour will depend entirely upon the extent of its attachment to the uterus,—consequently, in the polypus with a considerable stem, will be fully equal, if not greater, than in the inversion of the uterus, the size of which has been diminished by time and the action of the absorbents :—that in either case, and interchangeably, according to the different period and circumstances of the disease, the surface of the tumour may be either smooth and polished, or present a rough and fungous feel: and that with respect to the previous history of the case, it is embarrassed by the fact that polypi have been produced *in the uterus*, and have only first passed into the vagina, immediately after the expulsion of the foetus, or of the placenta. In the case of recent inversion, the combination of some of these diagnostics may enable us to decide with accuracy on the nature of the case; but they are insufficient to guide our judgment, when we are first called to give our opinion on the disease in its chronic stage.

Neither will the examination of the hy-

pogastric region enable us to form any more certain *decision*; for, independently of the difficulty of distinguishing the uterus, above the pubes, in its unimpregnated state, arising from the fatness of the patient, and other circumstances, it is certain that in every instance of large polypus, the uterus will be dragged down by its weight lower into the pelvis, and consequently its state will be less cognizable; while even, if we were capable of detecting in this manner the presence of inversion, it would still remain to be decided, whether the disease were originally such, or had been slowly produced by the action of a polypus implanted upon the fundus uteri.

On the whole, therefore, we infer the difficulty and uncertainty of the diagnosis; and we proceed to consider the consequences of *inversio uteri*.

§. II. THE CONSEQUENCES OF INVERSIO UTERI.

When the uterus has become inverted, immediate hemorrhage takes place, which is quickly followed by faintness, and a sense of fulness in the vagina, and, in the greater number of instances, almost by immediate dissolution. Two instances of this kind have occurred within my knowledge, during the last few years, when the uterus has been inverted by female accoucheurs, and the patients have perished, before adequate obstetrical relief could be obtained for them. But if the present danger be escaped, " the woman either " drags on a miserable existence for a " number of years, or her life is cut short " by the constant drain. Cases of this " kind derive little benefit from external " applications ; and it is obvious, that no- " thing is to be expected from internal " medicines *."

* Clarke's Diseases of Females, Vol. I. p. 149.

Mauriceau remarks, " Le 11 Mars,
 " 1684, j'ai vû une femme, qui avoit une
 " perte de sang continual depuis huit mois
 " qu'elle etoit accouchée, laquelle je ju-
 " geai être entièrement incurable, et la
 " devoir certainement faire mourir, comme
 " il arriva peu de temps ensuite; parceque
 " cette perte de sang venait d'un renverse-
 " ment du fond de la matrice*."

Again, after stating the circumstances of the case, in which the uterus had been inverted two days, and was swollen considerably, &c. he continues, " Ce qui me fit juger, que cette femme mourroit certainement dans la suite, comme je l'ai vû arriver à deux autres femmes, après avoir trainé durant quelque temps une vie languissante, et pleine de douleurs, à cause de la continue perte de sang, et fluxion d'humeurs, qui accompagne toujours cette fâcheuse maladie, à laquelle on ne peut remedier, comme j'ai dit, si on

* Mauriceau, *Traité des Accouchemens*, Tome II.
 p. 294.

“ laisse passer l’occasion de la faire, dès le commencement qu’elle paroît,” &c.

“ On doit remarquer, que le renversement du fond de la matrice, qui ne fait jamais de la sorte, si ce n’est immédiatement après l’accouchement, cause assez souvent une morte subite à la femme, pour la grandeur de la perte qui lui arrive toujours pour lors; et que celles qui évitent cette mort soudaine, ne manquent pas, quoiqu’elles aient échappées ce premier danger, de perir dans la suite du temps *.”

Heister says, “ Sed quicquid tandem harum rerum sit, sane nisi *confestim ute-*
 “ *rus in sedem naturalem restituitur, vehe-*
 “ *menter brevi increscit, et citissima feré sem-*
 “ *per mors, ut pralaudatorum auctorum,*
 “ *quamplurimi testantur, insequitur: adeo-*
 “ *que omni modo festinandum, quia max-*
 “ *imum in morâ hic periculum est †.*”

* Mauriceau, Tome II. p. 559.

† Heister, Vol. II. p. 1087.

“ Les pertes qui sont entretenues par
“ cette depression, résistent à tous les me-
“ dicamens que l'on met en usage.”

“ Au lieu du sang, quelques femmes
“ rendent seulement des humeurs mu-
“ queuses: quelque peu abondant que
“ soit cet écoulement, il finit *toujours par*
“ *épuiser à la longue, les femmes*; l'épuise-
“ ment du sujet qui en est la suite, amène
“ souvent des syncopes fréquentes, et
“ peut même devenir la cause des convul-
“ sions*.”

Peu speaks of the disease as fatal from immediate hemorrhage, from the *consequences* of internal hemorrhage; and from symptoms of irritation and gangrene, arising in consequence of the neglect of reduction. For its great curiosity, I extract the passage relating to the latter mode of termination: “Troisièmement, souvent pour “ avoir trop attendu à faire la reduction de “ la matrice, il est impossible de la remet-

* Gardien, Tome III. p. 325, 326.

“ tre dans son propre lieu, et l'on ne peut
 “ la repousser au plus, que jusques dans le
 “ vagin, qui n'est qu'une reduction impar-
 “ faite: qui fait qu'elle devient dure, tu-
 “ méfiée, livide, noire, et qu'elle tombe
 “ insensiblement en cangréne, par l'étrang-
 “ lement que fait l'orifice interne, qui pa-
 “ reillement se durcit, se tuméfie, et fais-
 “ ant une manière de ligature, éteint la
 “ chaleur naturelle en cette partie, par
 “ l'interception des esprits; et la cangréne
 “ étant communiquée au dedans, apporte
 “ des vapeurs putrides au cœur, le trans-
 “ port au cerveau, et la mort*.”

Levret, commenting upon the aphorisms of Mauriceau, coincides with him in opinion, that the inversion of the uterus was attended ordinarily, sooner or later, by the death of the subject†.

Dr. Haighton speaks of *inversio uteri* as

* Peu, *Pratique des Accouchemens*, p. 585—587.

† Levret, *L'Art des Accouchemens*, p. 421.

generally fatal; and that if patients escape the first symptoms, they remain liable to frequent hemorrhage, to which they usually fall victims ultimately*.

The strangulation of the intestine has been mentioned by some authors as a probable result; but the catalogue of suffering is sufficiently long, without endeavouring to establish consequences which are purely hypothetical.

Denman observes, “ Not that all women would die though the uterus were inverted; but they would be in the greatest and most imminent danger: not to mention the shocking state they would be in for the remainder of life, if they escaped †.”

“ Many die; while others survive, subject to an oppressive sense of weight, and

* Haighton’s MS. Lectures.

† Denman, Vol. II. p. 357.

“ frequent hemorrhages, which bring on
“ great emaciation *.”

“ Les hemorrhagies cessent pour se re-
“ nouveler de temps en temps, et la femme
“ succombe d'épuisement, si l'on ne remé-
“ die à son infirmité †.”

“ Inversion may terminate in different
“ ways: it may prove rapidly fatal by he-
“ morrhage, or it may excite fatal syn-
“ cope, or convulsions; or it may operate
“ more slowly, by inducing inflammation,
“ or distension of the bladder; or after se-
“ vere pains and expulsive efforts, the pa-
“ tient may get the better of the imme-
“ diate injury: the uterus may diminish to
“ its natural size by slow degrees, and
“ give little inconvenience; or it may dis-
“ charge foetid matter, and give rise to fre-
“ quent debilitating hemorrhage; or hectic

* Cooper's Surgical Dictionary. Article, Inversion of the Uterus.

† Nauche, Maladies de L'Uterus, p. 120.

“ comes on, and the patient sinks in a miserable manner*.”

Engravings of inverted uterus are given by Heister, and Dr. James, the latter of which, however, appear to be copies from the former †.

More recent and accurate delineations of the disease are exhibited by Dr. Baillie, and by Hunter and Denman ‡.

A miscalled case of inversion, (*really retroversion*) of the uterus, is to be found in the Medical Observations and Inquiries §.

Giffard gives a fatal case of *inversio uteri*, and speaks of the disease as always fatal ||.

* Burns's Midwifery, p. 382.

† Heisteri Chirurgia, tab. 93. fig. 1, 2, 3, 4, 5. James's Medical Dictionary, plate 55, fig. 1, 2, 3, 4, 5.

‡ Baillie's Engravings of Morbid Anatomy, Fasciculus 9, pl. 5.—Hunter's Gravid Uterus, Plates 14 and 15. Denman's Plates of Midwifery, pl. 12 and 17.

§ Med. Obs. and Inquiries, vol. 4. p. 388.

|| Giffard's Midwifery, p. 421.

Smellie relates a case of polypus, which was amputated, and terminated fatally; probably a portion of the uterus was included in the operation, since it is said, "that the under side of the uterus was found mortified*."

Three cases of recent inversion of the uterus successfully treated by Mr. Browne of Camberwell, Dr. Welsh of Chelmsford, and — of Pontefract, are mentioned in the Edinburgh Practice of Physic and Surgery †.

Similar successful cases are related by La Motte ‡, and Portal §.

Fatal histories of this affection of the uterus, are given by Peu ||, who relates *three*

* Smellie's Midwifery, vol. 2. p. 93, 96, 97.

† Edinburgh Practice of Physic and Surgery, vol. 5. p. 494, &c.

‡ La Motte, Traité des Accouchemens, 2d Edition, Obs. 413. Tom. 2. p. 1256.

§ Portal, Observation 16.

|| Peu, Pratique des Accouchemens, p. 603—606.

cases, by Portal*, Vanderwied and Millot†, Chapman‡, Saviard§, Heister||, Smellie¶, and Mauriceau**.

After reading the above, none can doubt the dreadful consequences of this disease. Perhaps, indeed, many successful cases may have occurred which have not been alluded to; but how vastly do the fatal instances preponderate, and how greatly would this list be augmented, could the blunders of ignorant practitioners, which have been quietly consigned to the grave, be only fully revealed! On this interesting subject, it may be useful to inquire a little further into the general prognosis, and the effect of remedies which have been employed.

* Portal, Obs. 76.

† Voyez Nauche sur les Maladies de l'Uterus.

‡ Chapman's Midwifery, Case 29.

§ Saviard, Obs. xv. et xxxvi.

|| Heister's Observations, Case 363.

¶ Smellie's Midwifery, Case 3. vol. 3. p. 444.

** Mauriceau, Observations de 255, 393, 685.

§ III. PROGNOSIS, AND EFFECT OF REMEDIES.

“ No other remedy,” says Clarke, “ than the injection of some very mild astringent fluid, three or four times a day. Some restraint will thus be placed upon the quantity of the discharge, and the parts will be kept clean by it*.”

Peu observes, “ Si la chute est vieille, il n'y a point d'autre cure que la palliative, par le moyen du bandage et du pessaire†.”

Puzos speaks of *inversio uteri*, in its chronic stage, as admitting only of palliative remedies‡.

“ The prognostic in cases of polypus of the uterus, may generally be favorable,

* Clarke's Diseases, vol. 1. p. 148.

† Peu, *Pratique des Accouchemens*, p. 603.

‡ Puzos, *Traité des Accouchemens*, p. 249.

“ since the operation is not dangerous, and
 “ even where the debility induced is very
 “ considerable, the patient generally re-
 “ covers*.”

“ Le plus souvent, on ne pourrait pas
 “ opérer la reduction, sans occasionner
 “ des accidens: on doit se contenter de
 “ conseiller *un pessaire*, pour soutenir la
 “ matrice *renversée*, et pour l’empêcher de
 “ sortir complètement†.”

“ The reposition of a uterus which has
 “ been long inverted, may be concluded
 “ to be impossible. All that art can do
 “ in such cases, is to alleviate their suffer-
 “ ings, to moderate symptoms, and some-
 “ times to support the perpending uterus
 “ with a flat pessary‡.”

“ The reduction of the inverted uterus
 “ is the *only step* that can be taken§.”

* Clarke’s Diseases, Vol. I. p. 231.

† Gardien, Tome III. p. 331.

‡ Denman, Vol. II. p. 358.

§ Cooper’s Surgical Dictionary, article, *Inversion of the Uterus*.

Dr. Haighton remarks, that where the uterus remains unreduced, the patient sometimes dies in a few hours, sometimes in a few days, or in a few months: but all generally die, for if they escape at first, their constitution is broken down by repeated hemorrhage, and they commonly sink from dropsy*.

Dr. Orme mentions the absolute necessity for its immediate reduction, and asserts that the disease proves fatal, if it continues to exist†.

Dr. Hamilton thinks somewhat more favorably of the event, and advises the employment of *astringent injections, to corrugate the vessels*‡.

In a former part of this *Essay*, instances have been mentioned, in which females have survived the first accidents, and have

* Haighton's MS. Lectures, 1809.

† Orme's MS. Lectures, 1766.

‡ Hamilton's MS. Lectures, 1812.

even lived tolerably comfortably ; but these, it is evident, are only exceptions to the general rule, and would not weigh a single atom in the scale, if the numbers who sink from the slow, but certain effects of hemorrhage and other diseases consequent upon it, could be appreciated. But these do not exist to tell their deplorable tale, and the former are blazoned and exaggerated as an excuse for indolence and indifference. It is highly probable, too, that these cases have been those in which the uterus has ceased to be a menstruating organ, and to be the centre of those sympathies, which render it so exquisitely sensible, during the former portion of female life.

Thus hopeless and cheerless is the situation of the wretched sufferers, who have experienced this worst of all calamities. And although here and there one may have miraculously recovered, and in spite of all her infirmities, may have been able, in some degree, to attend to the duties of society ; yet no one has a right to calculate upon an event so fortunate. The general prospect for the patient, is that of

death sooner or later from the influence of this disease ; and perhaps even this termination of wretchedness, is to be preferred to the continuance of suffering. But if there be another remedy, which affords a hope of entire and permanent relief, surely humanity will rejoice to adopt it ;—and genuine science will prefer the *hazard of the expedient*, (though it be attended with some degree of danger) to the cruelty of leaving a suffering fellow-creature to the unrepressed ravages of disease.

§ IV. EXTIRPATION OF THE UTERUS.

On this subject we find the following observations in Clarke :—“ In those cases of “ inversion of the uterus, where the *woman* “ *has passed the menstruating age*,—where “ her comfort is destroyed by the disease, “ and where the profuseness of the dis- “ charge threatens her with death, from “ the debility which it produces ; it may be “ advisable to recommend the performance “ of an operation, which *has* been attended

“ with success, viz. the removal of the
“ inverted uterus itself.”

“ When the *uterus has been inverted many*
“ *years, the ovaria and the Fallopian tubes,*
“ *which are enclosed in it, become consoli-*
“ *dated with it, and the operation becomes*
“ *less hazardous, because the cavity of the*
“ *abdomen is not exposed. How far it may*
“ *be right to resort to this operation during the*
“ *menstruating part of a woman's life, the au-*
“ *thor has no means of judging*.*”

Clarke relates a case of inversion of the *uterus and vagina*, in a patient aged *sixty*, where the ligature was applied around the contracted part of the tumour, that is, “ where the uterus terminated, and the *vagina began.*” The case was successful.

Ambrose Parè, relates a case of the removal of the uterus of a patient aged *thirty*, who survived: but she died three months

* Clarke's Diseases of Females, p. 149, 150.

afterwards of a pleurisy. " This case occurring during the menstruating part of the woman's life, shews that the operation may be done with impunity, unless it be considered that the woman would not have had the inflammatory attack, if she had continued to menstruate*."

Mauriceau says, " Neanmoins, Ætius et Paul Æginette, disent qu'on a vu échapper des femmes à qui pour un tel accident, on avoit entièrement extirpé la matrice. Paré rapporte quelque histoire semblable; ce qui fait pareillement Rousset, en son enfantement Césarien: mais celà arrive très rarement†."

" Si la totalité de la matrice renversée, est frappée de gangrène, il faut s'attendre aux conséquences les plus graves, et la plus souvent, à une mort prochaine. Cependant, il n'est pas impossible que la Nature, mette des bornes à la mortification

* Clarke, p. 151.

† Mauriceau, Tome I. p. 393, 394.

“ et qu’elle triomphe de l’état le plus desespérant,” &c.*

Under the head of “ Erreurs dange-
“ reuses,” Delpech writes; “ On a exercé
“ sur la matrice elle-même, différentes
“ opérations, *croyant agir sur le polype*
“ *seulement*, et l’on a réellement amputé
“ de la sorte, des proportions diverses de
“ l’utérus, et même la totalité de l’organe,
“ avec plus ou moins de danger†.”

Gardien remarks, on this subject, “ M.
“ Marc Antoine Petit, croit que lorsqu’il
“ existe un renversement complet et *ancien*
“ de la matrice, une ligature de cette or-
“ gane, si elle étoit faite à temps, pourroit
“ sauver les jours de la femme. Il rapporte
“ avoir été témoin du succès d’une sembla-
“ ble opération faite par un chirurgien du
“ plus grande mérite (Mon. Bouchet) qui
“ lia pour un polype, la matrice renversée
“ depuis trois années, et qui arracha par

* Delpech, Tome II. p. 592.

† Ibid. Tome III. p. 402.

“ cette heureuse erreur, la femme à la mort
“ lente qui la menaçoit*.”

“ Cependant, on ne peut pas nier que
“ quelques auteurs aient pris un polype
“ pour une matrice renversée : il est très-
“ probable que cette méprise a eu lieu dans
“ les cas, où les auteurs prétendent avoir
“ amputé la matrice, que l'on n'avoit pas
“ pu reduire. Je présume que ceux qui
“ citent ces faits, en croyant amputer la
“ matrice, n'ont amputé qu'un polype†.”

“ There is no doubt, but in a few in-
“ stances, the uterus has been amputated,
“ and the patient has recovered‡.”

“ Astringent applications, with attention
“ to cleanliness, good diet, and the occa-
“ sional use of opiates, may give relief;
“ but if they do not, we are warranted to
“ prefer extirpation of the uterus to certain

* Gardien, Tome III. p. 332-333.

† Ibid. Tome III. p. 312-13.

‡ Cooper's Surgical Dictionary, loco citato.

“ death. This operation has been repeatedly successful, and is performed by applying a ligature high up, and cutting off the tumour below*.”

Successful cases of extirpation are mentioned by Carpi, in 1507; by Sclevogt, Abraham Vater, Mon. Laumonier in 1791, and Mon. Bouchet†; by Mon. Boudol†; M. Dessault§; and Mr. Hunter, of Dumbarton||.

Denman's second case, under the head of Polypus, is one in which *inversio uteri* was mistaken for the former disease, and in which the application of the ligature gave rise to sickness and vomiting, and fatal symptoms.

Goulard's case of Inversion of the Uterus terminated fatally.

* *Burns's Midwifery*, p. 384.

† *Encyclopédie Methodique*, Article *Renversement de la Matrice*.

‡ *Recueil Périodique de la Société de Medicine*, Tome IV. p. 99.

§ *Journal de Medicine*, Tome LXXII.

|| *Annals of Medicine*, Vol. IV. p. 366.

Dr. Denman (Vol. I. p. 105) mentions a case in which the elongated os uteri, was also enlarged, and had assumed the form of a polypus. " In this case, if there should be any token of imminent danger, he thought it would be right to take the chance of doing some good, and prolonging her life, by passing a ligature round the small part of this excrescence, near the proper os uteri."

Burns says of the case by M. Herbinaux ; " the ligature seemed to act on an inverted portion of the womb, producing pain, fever, and convulsions: it was slackened, but afterwards, notwithstanding a renewal of dreadful suffering, it was with a perseverance hardly to be commended, employed so as at last to remove the polypus."

In Dessault's case, a portion only of the uterus was removed.

A case of successful extirpation is inserted in the Journal de Medicine, for August, 1786.

Mr. Primrose relates a case, where a great part of the uterus sloughed off, and the woman recovered.

Wrisberg relates a case where the uterus was cut off by the midwife, who had inverted it.

A successful case (Clarke's) is given in the Edinburgh Medical and Surgical Journal, Vol. II. p. 419.

Another case is mentioned in the Recueil des Actes de la Société de Lyons.

Yet, in the face of this evidence, we find the following sceptical observations :

“ Il n'est guère permis de douter que la matrice n'ait été extirpée avec succès dans un petit nombre de cas. Mais le plus souvent, ceux qui rapportent ces faits, en croyant enlever la matrice, n'ont extirpé qu'un polype, on bien n'ont que faiblement intéressé l'utérus : c'est ce qui a eu lieu dans l'observation de *M. Lamonier*. M. M. Piet, Dessault, et Baude-locque, ont examiné la pièce, et ont jugé

“ que ce n’était qu’un polype, et une
 “ partie du fond de la matrice, comprise
 “ dans la section : c’est aussi ce qui était
 “ arrivé dans l’exemple que M. Desault a
 “ consigné dans le 72de Volume du Journal
 “ de Medicine.”

“ Si quelquefois la matrice a été am-
 “ puté avec succès, on ne peut pas pour
 “ cela admettre que ce viscére renversé
 “ après l’accouchement puisse être enlevé
 “ sans inconveniens : les circonstances
 “ dans lesquelles, ces auteurs ont opéré,
 “ ainsi que tous ceux qui rapporte de
 “ réussite de l’extirpation de la matrice
 “ sont très différentes*.”

“ Ils n’ont amputé la matrice,” says Baudelocque, “ que lorsqu’elle était dure,
 “ squirrheuse, ulcérée, gangrenée—qu’elle
 “ avoit peu de volume—qu’elle n’avoit plus
 “ aucune fonction à remplir ; qu’elle avoit
 “ cessé depuis long-temps, celle pour
 “ laquelle l’avoit destiné la Nature†.”

* Gardien, Tome III. p. 333, 334.

† Baudelocque, l’Art des Accouchemens.

" Cependant M. Osiander, professeur à
 " Gottingue, rapporte qu'une sage-femme,
 " ayant tiré la matrice avec la placenta
 " hors du vagin, la coupa au niveau de
 " celui-ci, sans que cette résection ait été
 " funeste à l'accouchée. M. Osiander fait
 " venir cette femme, à son cours, chaque
 " année, pour être touchée par les élèves.
 " Ce fait et autres analogues, lui ont fait
 " naître l'idée de faire l'extirpation des
 " parties de la matrice affectées de cancer,
 " et il assure l'avoir exécuté plusieurs fois
 " avec succès*."

Denman observes, that, " in the Museum
 " of the late Dr. Hunter, there is preserved
 " a polypus, which, from its size, appears
 " to have inverted the uterus,—and the li-
 " gature, when passed over it, being out
 " of reach, was found to have fixed upon
 " the inverted part of the uterus, so that
 " when drawn tight, it had produced the
 " same symptoms, as those described in
 " Case II. It is remarkable, that this

“ woman lived till the inverted portion of
 “ the uterus was more than half cut through
 “ by the ligature, and I am of opinion,
 “ with very slow proceeding, she might
 “ have survived the operation.” He goes
 on to state a case in which a portion of
 the os uteri was included in the ligature
 and removed,—the patient recovering: but
 adds, that the event of such cases must be
 both hazardous and doubtful*.

Ould describes the manner in which inversion is produced, and the necessity for its immediate reduction; predicts, that in all probability, the patient will die, if it be not returned; “ though there are histories
 “ of some who have survived the amputa-
 “ tion of the prolapsed womb: which was
 “ performed by tying a ligature round its
 “ neck, near the pudendum, which is to
 “ continue till the part drops off†.”

The opinion of Nauche, though not

* Denman, Vol. I. p. 102, 103.

† Ould's Midwifery, 1742. Pugh's Midwifery, 1754.

given decidedly, is evidently unfavourable to an operation*.

“ Lorsque la matrice, malgré les tentatives les mieux combinées, est irréductible, les femmes, sans être dévouées à une mort prompte, restent néanmoins presque toujours exposées à des pertes fréquentes de sang, ou de mucosités, qui les jettent dans un état de consomption. Ces pour prévenir des suites aussi déplorables, que des praticiens conseillent d'étuver la matrice avec des infusions, ou décoctions astringentes. Mais n'auroit on pas à craindre, alors de donner à cet organe la dureté du squirrhe ? D'autres tels que Marc Antoine Petit, de Lyons, proposent d'en faire la ligature à temps pour arracher la femme à une mort presque inévitable. Mais un seul *exemple de succès*, rapporté par ce praticien, suffit-il pour accréditer cette opération ?”†

“ Plus on réfléchit sur les difficultés que

* Nauche, sur les Maladies de l'Uterus, p. 126, et sequent.

† Capuron, Traité des Maladies des Femmes, p. 510.

“ présente cette espèce d'hystérotomie, plus
 “ on y entrevoit de dangers, et plus on est
 “ porté à douter qu'elle ait jamais été pra-
 “ tiquée, ou qu'elle ait été salutaire aux
 “ malades*.”

“ Enfin on a considéré l'extirpation de
 “ la matrice comme le meilleur moyen de
 “ prévenir la gangrène, qui succède à l'en-
 “ gorgement inflammatoire de cet organe.
 “ Mais a-t-on beaucoup de faits, en faveur
 “ de cette espèce de castration ? Si d'un
 “ côté, il est presque impossible de révo-
 “ quer en doute le témoignage de Vieussens
 “ et de Roussel, ainsi que celui des doc-
 “ teurs Marchal de Strasbourg, Lagresie
 “ et Burdol, qui garantissent l'innocuité
 “ de l'amputation de la matrice, comment
 “ ne pas soupçonner d'un autre côté, que
 “ *la plupart de ces hardis opérateurs, n'ont*
 “ *porté leur instrument, que sur un polype ?*
 “ C'est ce qui est arrivé à Laumonier, d'a-
 “ près le rapport de Piet, Dessault et Baude-
 “ locque. La pièce soumise à l'examen

* Capuron, *Traité des Maladies des Femmes*, p. 145.

“ de ces derniers, par le chirurgien de Rouen
 “ n'étoit qu'un polype, avec une partie du
 “ fond de la matrice, comprise dans la
 “ section. Desault a consigné un autre
 “ exemple d'une semblable méprise, dans
 “ le dix-septième volume du Journal de
 “ Médecine.

“ D'ailleurs on ne saurait disconvenir,
 “ comme l'a fort-bien remarqué Baudeloc-
 “ que qu'on ne puisse amputer sans incon-
 “ vénient une matrice dure, squirrheuse,
 “ ulcérée, gangrenée, surtout quand elle
 “ a peu de volume, et qu'elle a cessé de
 “ remplir la fonction à laquelle la nature
 “ l'avoit destinée. C'est aussi pour cette der-
 “ nière raison, que l'extirpation de la ma-
 “ trice pourroit réussir chez les femmes
 “ âgées comme l'observe Molinetti. Mais
 “ en seroit-elle de même si l'on extirpoit
 “ une matrice renversée, et irréductible, à
 “ cause de son engorgement chez les jeunes
 “ femmes ? Cet organe malgré son deplace-
 “ ment, est encore sain, très volumineux ;
 “ les vaisseaux qui l'arrose ont alors, un
 “ très-gros calibre ; enfin, il est le centre
 “ d'une grande activité au moment où il

“ vient de se débarrasser du produit de la conception, et de se renverser*.”

“ Le polype qui a son attache au bord de l’orifice de la matrice, est celui qui se précipite le plus souvent par la vulve, et c’est dans ce cas que la tumeur a souvent été prise pour le corps de la matrice renversée. Quelques gens de l’art, même respectables, d’ailleurs, l’ont liée et amputée, croyant amputer la matrice. Les six premières observations du Mémoire de Mons. Levret, en donnent autant de preuves ; et si l’on fait bien attention aux opérations de tous ceux, qui ont prétendu avoir amputé les matrices, tels qu’on en trouve dans Rousset, Houiller, Mercurial, les Ephémérides d’Allemagne, et plusieurs autres ouvrages périodiques, on voit qu’ils n’ont amputé autre chose que des polypes utérins †.”

* Capuron, Maladies des Femmes, p. 510—512.

† Herbiniaux sur les Accouchemens Laborieux, et sur les Polypes de la Matrice, Tome II. p. 36.

And finally, Jourdan observes: " Il pa-
 " roit toutefois qu'on a beaucoup moins
 " à craindre alors que peut-être on serait
 " tenté de le croire au premier abord, et
 " que la matrice se prêterait volontiers, à
 " une extirpation, sinon totale, au moins
 " partielle. Ce n'est pas ici le lieu d'entrer
 " dans aucune discussion au sujet des *pre-*
 " *tendues extirpations* de matrices renver-
 " sées, dont on trouve plus d'un exemple
 " dans les livres, et qui ne furent sans
 " doute pour la plupart, que de simples
 " ablutions de polypes uterins*."

Such was the information I possessed; and on these grounds we resolved on adopting the treatment described in the case just related. But it is manifest that the successful issue of this case—*the removal of so large a portion of the uterus as the preparation exhibits; in a young woman; during the menstruating part of her life, and while*

* Dictionnaire des Sciences Medicales, Tome XXIII. Art. Hysteroptose, p. 290.

the uterine vessels were constantly pouring out a very large secretion; scarcely three months from the time of her delivery; and in a subject the most irritable and unfavourable for such an operation, must attach a greater degree of credibility to some of the previous histories of similar success; must dissipate every doubt as to the practicability of such an operation; and must prove at least that in such an otherwise hopeless state, the surgeon is justified in attempting to afford permanent relief.

But most thinking practitioners are not satisfied, with a conviction of the *possibility* of success from an operation; they inquire into the *measure of probability* attached to such a procedure, in order to determine its *expediency*. For this reason, we shall endeavour to estimate, as far as possible, the degree of relative danger, in the removal of polypus or *inversio uteri*.

§ V. CONSEQUENCES OF OPERATION.

It is not easy to estimate the degree of danger arising from the circumstance of placing a ligature upon the inverted uterus, and to compare this with the effects resulting from the operation of a similar cause, acting upon a polypus of that organ; because we are not in possession of circumstantial details of *such operations* (of the former class) as *have terminated successfully*. Almost all we know is of the *violent symptoms* which have arisen in *those instances* that have been attended *with fatal effects*: and *of these*, our information has been principally derived from Denman and Hunter.

Instantaneous nausea, pain, and vomiting, followed by peritoneal inflammation and death, have been enumerated, as the symptoms consequent upon the application of a ligature around the inverted uterus. Yet it is certain that such conse-

quences have by no means invariably followed: and what has sometimes been the result of the same operation upon polypus?

Guillemeau speaks of the operation of a ligature upon polypus (condilome) as often occasioning *much pain and inflammation*; and advises, in such cases, the removal by the knife of such portion of the tumour as may not have been cut through by the ligature*.

Heister says, “ *Nisi enim tempestive, reponi is potest, vix ac ne vix quidem convalescere, nec vel utero quidem ligato, aut exciso, quemadmodum non nulli putarunt, mulieres consueverint. Ruyschius enim exemplum refert, ubi Chirurgus uterum ejusmodi propendenter, ligaturâ auferre voluit: sed res non successit; et mulier brevi mortua est†.* ”

* Guillemeau, *Traité des Accouchemens*, p. 498.

† Heisteri, *Chirurgia*, Tome II. p. 1089.

“ In fixing the ligature,” writes Hamilton, “ the operator must be cautious not “ to mistake the tubercle of the os tincæ “ for the polypous tumour; a blunder “ which would prove of fatal consequence “ to the patient*.”

“ If the stomach should be irritable,” says Clarke, in treating of the removal of polypus by ligature, “ a saline draught, in a “ state of effervescence, with a few drops “ of laudanum, may be exhibited: and if “ the patient should complain of pain from “ long confinement to the same posture, “ a sufficient dose of opium shquld be “ taken, to procure rest†.”

“ D'un autre côté, un polype volumi-
“ neux peut opérer le renversement partiel
“ de la matrice, surtout, peu de temps
“ après l'accouchement. N'est il pas à
“ craindre, que la ligature soit appliquée,

* Hamilton's Outlines, p. 114.

† Clarke's Diseases, Vol. I. p. 243.

“ sur le tissu de la matrice elle même? Quelques faits dans lesquels on voit que cette opération a été suivie d'une inflammation assez grave, seroient propres à le faire croire.”—No evidence is however alleged to prove that such a misapplication of the ligature had actually taken place: only it is suggested à priori, that this must have been the case, because *severe inflammation* was the result: a consequence by no means justifiable.

The same author, however, goes on to remark, “ Du reste, quelque soit l'état des choses, on ne doit pas perdre de vue, que la ligature la mieux située, et la plus heureusement accomplie, peut facilement donner lieu, à une inflammation plus ou moins grave de la matrice, qui exige des soins particuliers*.”

“ Lorsque le pédicule du polype est épais, ce qui force à serrer davantage la liga-

* Delpech, Maladies Chirurgicales, Tom. III. p. 406.

“ ture, il survient quelquefois *des douleurs*
 “ *aigues—de l'inflammation—de la fièvre, et*
 “ *d'autres accidens, que l'on dissipe par la*
 “ *saignée—la diète—des fomentations emol-*
 “ *lientes—et des injections de la même na-*
 “ *ture*.*”

Dr. Denman mentions two cases, in the first of which the application of the ligature *upon a polypus, caused very violent pain in the abdomen, and obliged him to slacken it, to use fomentations, and to give opiates.* He gradually tightened the ligature, when the patient became easier†.

Dr. Pope recently mentioned to me in conversation, a case of polypus which he attended with Dr. Denman, and in which it became *necessary to remove the ligature three several times from the pain, fever, tenderness of the abdomen, and inflammatory symptoms to which it gave rise.*

* Gardien, *Traité des Accouchemens, Tome I.* p. 435.

† Denman's *Midwifery, Vol. I.* p. 104.

“ Numerous complaints of a serious
 “ nature are occasionally *the result of tying*
 “ *a polypus of the uterus. Acute symptoms*
 “ *frequently follow the application of the*
 “ *ligature; and are either of the inflamma-*
 “ *tory or spasmodic kind. Sometimes a fe-*
 “ *ver arises, and the polypus becomes exceed-*
 “ *ingly painful: in this case, venesection is*
 “ *often necessary. When this (opium) is*
 “ *ineffectual, and the symptoms are severe,*
 “ *it may be proper to slacken the ligature a*
 “ *little*.*”

“ *Even where the uterus is not included,*
 “ *fever may succeed the operation, and be*
 “ *accompanied with slight pain in the*
 “ *belly †.*”

“ *La fièvre se manifeste ordinairement le*
 “ *second jour; la tumeur devient brune—*
 “ *puis elle noircit, et il en decoule une*

* Cooper's Surgical Dictionary, art. Polypus of the Uterus.

† Burns's Midwifery, p. 80.

“ sanie ichoreuse, putride—qui occasionne
 “ souvent dans le vagin, aux grandes
 “ lèvres—au périnée—aux cuisses, des ul-
 “ cérations qui font vivement souffrir les
 “ malades.

“ L'hémorragie s'arrête ordinairement
 “ le jour même de la ligature: *mais cette*
 “ *opération est suivie quelquefois de divers*
 “ *accidens, de douleurs, de convulsions, &c.*

“ Lorsque *la douleur est très vive*, on
 “ *fait mettre la femme dans un bain tiède*,
 “ *pendant une ou plusieurs heures, plusieurs*
 “ *fois le jour, et plusieurs jours de suite*:
 “ *on prescrit des boissons mucilagineuses et*
 “ *calmantes: et si ces moyens ne font pas*
 “ *cesser la douleur, on se hâte de desserrer*
 “ *la ligature.*

“ *Les malades souffrent quelquefois horri-*
 “ *blement dans leur lit, tandis que la douleur*
 “ *s'apaise dans le bain: on peut alors les y*
 “ *laisser pendant trente six heures, &c.*

“ Du moment où les accidens se sont

“ calmés, on porte de nouveau la ligature
 “ sur la tumeur, et l'on *tâche de remédier*
 “ *aux accidens* précédemment indiqués*.”

Dr. Haighton, in his Lectures, used to mention the constitutional irritation set up in consequence of a ligature upon a polypus.

The extreme scarcity of the work of Mons. Herbiniaux will be a sufficient apology for the length of the extracts I have given.

“ Le lendemain, 14 d'Août 1769, je
 “ l'opérai en présence de ce Medecin : la
 “ journée fut assez bonne : Le 15, la ma-
 “ lade sembloit mieux ; mais ayant res-
 “ serré l'anse de ma ligature, elle com-
 “ mença à se plaindre de vives douleurs
 “ vers les reins. Le 16, je la resserrai en-
 “ core ; je fus surpris de sentir une résist-
 “ ance beaucoup plus grande que d'ordi-
 “ naire, d'autant plus que par les marques

* Nauche, Maladies de l'Utérus, p. 196, 197, 198.

" de fil blanc, faites à ma ficelle, je voy-
 " ais que le pédicule étoit encore fort gros,
 " sans qu'il me fût possible de le resserrer
 " davantage, à moins que de m'exposer à
 " rompre la ficelle:—la malade *souffrit*
 " *tellement, qu'elle ne discontinua point de*
 " *toute la journée, de même que la suivante,*
 " *à jeter des cris capables d'émouvoir le*
 " *cœur le plus dur.*" The ligature was how-
 ever tightened on the 18th; " *mais la ma-*
 " *lade ne peut absolument supporter la dou-*
 " *leur; le bas-ventre et les lombes devinrent*
 " *durs et si sensibles, qu'elle en peut souffrir*
 " *aucune couverture: les muscles des cuisses*
 " *et des jambes furent sans cesse en convul-*
 " *sion, et la voix laissoit à peine entendre*
 " *ses cris.* Effrayé de ces symptômes je
 " desserrai ma ligature, après quoi tout se
 " calma sur le champ."

Mons. Herbiniaux, conceiving it im-
 possible that polypus could be so sensible,
 imagined that he must have included some
 part of the uterus in his ligature. The
 ligature was therefore again applied, with
 some peculiar precautions, on the 21st;
 yet, " *quelques heures après survinrent*

" les ménées convulsions. Comme en pareil
 " cas, il me paraissait que la malade devoit
 " vaincre ou mourir, je la laissai en cet état
 " deux fois vingt-quatre heures : mais alors
 " le froid extrême des pieds et des mains, la
 " roideur convulsive et constante des extré-
 " mités, le pouls petit et serré, et la face
 " livide couverte de sueur froide, me firent
 " craindre de la voir expirer avant peu ; je
 " fus donc encore obligé, de desserrer
 " l'anse de ma ligature et de l'ôter tout-à-
 " fait."

Convinced, however, that this was none other than polypus, Mons. Herbiniaux returned to the attack on the 31st, and applied a very fine ligature, on the situation where the first had been placed, and proceeded most gradually to tighten it, but the same symptoms arose as before, and in the beginning of September he abandoned the hope of removing the tumour simply by its strangulation. His next object was to convey an active caustic into the centre of the polypus ; but this project did not succeed. The gradual tightening the ligature was then tried, but with the

same frightful consequences, and the ligature was wholly withdrawn in the beginning of October. The polypus soon began to increase in size: and, finally, on the 28th of October, a ligature was applied, and the tumour amputated about half an inch below. The consequences of this operation were, in his own words—“ Il n'y “ eut aucun écoulement de sang: au reste, “ les symptômes ne firent qu'augmenter après “ l'opération; la douleur lui fit jeter des “ cris et des hurlements épouvantables, le “ ventre goufla, et devint douleuroux au “ toucher: vers le soir, toutes les extrémités “ furent en convulsion: à minuit la respi- “ ration devint très laborieuse, la voix s'étei- “ gnit; le pouls fut très petit et intermittent: “ enfin tout me faisoit craindre la mort pro- “ chaine de la malade.”

At the risk of hemorrhage, the ligature was relaxed, until quiet was reproduced, and the patient recovered rapidly*.

* Herbiniaux, sur les Accouchemens Laborieux, et sur les Polypes de la Matrice, Tome II. p. 108—118.

Again, in relating another case, Herbiniaux remarks, “ Comme je l’avois trop fort serrée cette première fois, *les douleurs se firent sentir vers la nuit du 28 au 29, tant vers les reins, que vers l’hypogastre, au point de se trouver insupportables à la malade, et de lui donner la fièvre.*”

Mons. H. being called to his patient slackened the ligature, and pursued the antiphlogistic treatment, “ dans la persuasion où j’étois, que le pédicule étoit fort dur et propre par conséquent à causer de grands troubles, dans la suite de l’opération ; comme je l’avois plusieurs fois éprouvé.”

On the 29th all was quiet ; the ligature was tightened on the 30th, which occasioned the return of intolerable pain ; on the 31st she had less suffering. On the 1st of June the ligature was again tightened, but occasioned so much pain that it was necessary to slacken it a little ; finally the operation succeeded, and the polypus became detached on the 5th*.

* Herbiniaux, sur les Accouchemens Laborieux, et sur les Polypes de la Matrice. Tome II. p. 156, 174.

Mons. Herbiniaux relates also another case, in which violent pain came on two hours after the application of the ligature, and induced him to bleed largely, to use fomentations, and pursue the antiphlogistic treatment: yet the symptoms were not subdued; much febrile action took place, and he was obliged to slacken the ligature; “ce qui ne fût pas suffisant, car le lendemain, la malade, sentit des *douleurs de poitrine*, et d’*estomac*; *elle eut plusieurs évanouissement dans la journée*, et donna encore plusieurs autres marques *d’attaque d’hytérie*.” The same symptoms, *with tumefaction of the abdomen, frequent syncope, intense pain of the stomach, and pyrexia*, continued, and returned with greater or less violence *each time* the ligature was tightened, *and were sometimes accompanied by nausea, convulsions, and furious delirium*. The ligature was repeatedly slackened, and again gently tightened as it could be borne. At length, after three weeks of incessant suffering, the polypus was removed by the peculiar process of cutting through the peduncle, by means of *sawing* it, by draw-

ing the ligature backwards and forwards for a considerable time, until this object was accomplished *.

Lastly, Capuron observes, “ Dans le “ premier cas, il suffit de faire, dans le “ vagin, quelques injections détersives, “ auxquelles on ajoute un peu de vinaigre; “ dans le second, il y a ordinairement *de la* “ *douleur, de la fièvre, et d'autres accidens* “ *inflammatoires* qui exigent *la saignée, la* “ *diète, les fomentations émollientes, &c.* “ Ces premiers accidens dissipés, le chirur- “ gien est quelquefois obligé de tordre en- “ core le serre-nœud à plusieurs reprises. “ Enfin le polype se mortifie, se flétrit, et “ se détache: il ne reste plus à sa base “ qu'une légère ulcération, qui se cicatrise “ avec facilité, et la matrice remonte à sa “ place ordinaire †.”

* Herbiniaux, sur les Accouchemens Laborieux, et sur les Polypes de la Matrice, Tome II. p. 156—174.

† Capuron, Traité des Maladies des Femmes, p. 201, 202.

Let these authorities be fairly compared with the relation of Glasscock's case, *during the whole progress of whose cure, her life never appeared in the remotest danger, and her sufferings, though confessedly great, were certainly not greater than those which are described, as accompanying frequently the extirpation of polypus*: let it be recollect-ed, that she never experienced one alarming symptom; and then, on a general review of the case, and of our present knowledge of the disease, will it be concluded, that it is possible, expedient, and safe, to attempt the extirpation of the uterus, by ligature, in cases where this organ has become inverted, and the patient suffers so much from the disease, as to endanger her life, or destroy her comfort?

§ VI. ON THE SEXUAL CONDITION OF THE FEMALE ORGANS, AFTER THE EXTIRPATION OF THE UTERUS.

THERE yet remains one consideration, arising out of the foregoing history, which demands our attention for a short time before closing this Essay: viz. the present state of the female organs. It has been objected against the operation enforced in the foregoing pages, that it will leave the patient liable to the tremendous risk of extra-uterine pregnancy; and it is right candidly to inquire how far such an objection will be found applicable to the general laws of physiological science.

It has been stated above, that the patient has obstinately refused permission for an examination; *but in every point of view it is reasonably to be inferred that the vagina terminates at its superior extremity in a cul de sac.* It has likewise been detailed that the mammae are in fine health, and that she enjoys as much as ever she did, the pleasures of connubial intercourse; indi-

cating, I conceive, that the *ovaria* are remaining behind, and that the chain of sexual sympathy exists entire, with the sole interruption to the *full exercise* of those sympathies, which arises from the absence of the uterus. And it has been stated, that a process something like menstruation, has occurred ; but that the discharge was exceedingly trifling and pale ; probably only mucus, from the follicular glands, situated about the cervix uteri, or perhaps a slight discharge from the few remaining vessels of that small portion of the cervix which is still existing.

In many points of view, the process by which the species is perpetuated, is enveloped by the most impenetrable obscurity ; yet there are certain circumstances, by the aid of which we can reason with tolerable certainty, as to the effect likely to be produced, on theceptive power of the female, by such a mutilation.

It would be vain and useless to attempt a specification of the hypotheses, which the imaginations of speculative men have

created, as a substitute for more certain information*. It will be necessary only just to enumerate the principal theories of conception.

1. It has been conjectured, that during the act of coitus, a prolific fluid, resembling in some degree the seminal fluid of the male, is likewise furnished by the female; and that the future embryo is formed from the union of the two principles in the cavity of the uterus. To give a little consistency to this idea, it has been supported by the gratuitous assumptions, that this supposititious fluid was *secreted* by the ovaria; consequently that *these* were glandular bodies, of which the Fallopian tubes were the excretory ducts, and the uterus the natural receptacle.

2. This hypothesis was mainly shaken by the discovery, that the ovaria contained

* For a general, though rapid sketch of the doctrines of Pythagoras, Empedocles, Hippocrates, Aristotle, Galen, &c. &c. see Denman's Midwifery, Vol. I. p. 198, et sequent.

vesicular bodies, which gave rise to the idea that *these vesicles* contained within themselves the first rudiments of the foetus ; that they were fecundated by the seminal fluid of the male ; and that assuming in consequence a state of activity, the vesicles burst, and being absorbed by the fimbriated extremity of the Fallopian tubes, were conveyed into the uterus, there to undergo their final development. This hypothesis supposes *contact* of the seminal fluid, with the ovaria and ovum. The cavity of the vesicle that has burst, being filled with lymph, and assuming a yellowish hue, is termed *corpus luteum*.

This hypothesis is supported by the fact that *sterility* is a consequence of the *removal* of the ovaria ; of their having undergone any morbid alteration of structure ; or of the Fallopian tubes having *been obliterated*.

It is also observed, that the seminal fluid has been detected in the Fallopian tubes, soon after coitus. Haller observed this phenomenon in the sheep ; and still further

he found, that soon afterwards a vesicle was seen to be *enlarged*, and that at a period still more remote, this vesicle had burst, and the corpus luteum was formed.

Semen has been detected in the Fallopian tubes by Ruysch, in two instances of the sudden death of females after coitus: and by Cheselden, in the dissection of several individuals.

Dr. Hunter found semen in the uterus of a bitch, destroyed during, or immediately after, the act of copulation. Semen has likewise been detected in *the uterus* by Galen, Cheselden, Lewenhoëck and Haller.

Extra-uterine foetuses have been developed in the ovaria, the Fallopian tubes, and the abdomen, indicating that the *fecundated ovum* has been arrested on its passage to the uterus from the ovary.

A ligature has been placed upon the Fallopian tube, by Nuck, three days after the admission of a bitch to the male. At the expiration of three weeks, he discovered

two fœtuses in that part of the Fallopian tube, which corresponded with the ovary, while the portion of tube below the ligature was perfectly empty.

“ The peristaltic action of the tubes,
“ and their adhesion to the ovaria during
“ the venereal ardor, argue strongly in
“ favor of the semen being conveyed along
“ them; because they can hardly be sup-
“ posed to *begin to occur at this period*,
“ for the purpose of conveying the con-
“ tents of the Graafian vesicle, as this
“ does not burst till a considerable time
“ after copulation*.”

“ The length of the penis—the force of
“ emission—the existence of a bifid glans
“ with two orifices, in the penis of those
“ male animals, the females of which have
“ two ora uteri, are circumstances of no
“ little weight in favor of the opinion, that

* Blumenbach's *Physiology*, by Elliotson, p. 327.

“ the semen does penetrate, at least as far
“ as the uterus*.”

There are difficulties in the way of this theory, since if the seminal fluid of the male only gives the stimulus of impregnation to the female ovum which contains the rudiments of the foetus, how are the peculiarities of the male parent conveyed to the offspring? what is the process by which *mule* animals are formed? and how is the birth of the mulatto to be accounted for?

Majendie cautions against receiving too implicitly, the idea of the actual contact of the seminal fluid, and its consequent phenomena, adding, “ La matrice à l'état “ de vacuité” (in the human female) “ n'est pas contractile, l'orifice utérin des “ trompes est d'une étroitesse extrême, et “ ces conduits n'ont aucun mouvement sen- “ sible connu †.”

* Blumenbach's Physiology, by Elliotson, p. 326.

* Majendie, Précis de Physiologie, vol. II. p. 421.

Yet he believes this to be the case ; and in fact the *actual* existence of the semen in the Fallopian tubes, is of more importance in the decision of this question, than all negative arguments and experiments.

Connected with this theory, is the idea of the *Aura Seminalis*. The difficulty with which it has been supposed, the gross and palpable semen can find its way through the Fallopian tubes to the ovaria, has induced some persons to entertain the opinion, that the semen goes no farther than the vagina, from which the specific vivifying aura, ascends through the uterus and Fallopian tubes to the ovary. This supposition, however, if correct, would not remove the difficulties of the case ; while the experiments of Spallanzani, have shewn that the *aura seminalis*, does not possess the smallest fecundating property.

There remains, however, yet to be considered another modification of the ovarian theory. In addition to the difficulties already stated, it has been asserted, that

impregnation has taken place, when the hymen has remained imperforate ; and when there was no opening to the os uteri. This has given rise to the *ingenious* speculations of Dr. Haighton, and what may be termed the *sympathetic theory*.

Dr. Haighton is of opinion, that impregnation occurs from the influence of the semen exerted on the ovaria, through the medium of the rest of the genital system. In support of this theory, the fact of conception having taken place, the hymen remaining entire, is alleged. But it is by no means proved that there was *no communication* with the vagina in these cases. On the contrary, it is supposable, that the hymen was cribriform, or contained some small aperture for the passage of the menstrual fluid, and which would consequently allow the injection of some part of the semen, although the penis could not be introduced into the vagina. The same reasoning will apply to the supposed case of impregnation, with an obliterated os uteri. And when it is recollect that according to the

experiments of Spallanzani*, an inconceivably small portion of semen will be sufficient to produce conception; and that this semen thrown into the vagina, by means of a syringe, *has produced* a similar effect; it will be impossible not to allow that a small quantity of semen may be received into the vagina and uterus, though the hymen should remain entire.

But Dr. Haighton has attempted the establishment of his theory, by direct experiments upon rabbits.

1. He divided both Fallopian tubes, and found that this destroyed the sexual desire of the animal; and infers, that this was occasioned by the destruction of the natural harmony and consent of parts. It may however be questioned how far this loss of venereal appetite would be met with in general. It may be supposed that the circumstance mentioned by the Doctor,

* Spallanzani found that *three grains* of semen, diffused through two pints of water, was even in this state of extreme dilution, sufficient to produce impregnation.

arose from the animal not having recovered its general health ; or from its having been introduced to the male, at a period when the venereal oestrus was not present.

2. The Doctor divided only *one* Fallopian tube, and found that in some instances this wholly prevented impregnation ; in others not. In every case, *each ovary exhibited evidences of impregnation : but fœtuses only were present on the side of the uninjured tube, because on the other side there was no way for the ova to pass into the uterus.*

3. Dr. H. next divided the Fallopian tube *three or four hours after coitus.* Sometimes the whole process was disturbed, so that impregnation did not go on : ordinarily, however, this was not the case. Dr. H. next waited eight, twelve, eighteen, twenty-four, thirty-six, and forty-eight hours, and always found the same appearances, as in Experiment 2nd. *No extra-uterine fœtuses were obtained.* At fifty-two hours the vesicles were observed to burst.

4. The tubes were divided at four days

and six hours ; but the ova having now descended into the uterus, the process of gestation was continued as usual.

From these experiments, the Doctor infers, that when the tube was divided, there could be no contact of seminal fluid ; yet there were evidences of impregnation ; *i. e.* *corpora lutea*, or rather vesicles in a state of activity. It remains *to be proved*, however, that these vesicles would have proved fruitful *ova*.

Dr. Haighton considers the stimulus of the semen applied to the uterus*, as the first link in the chain of sympathies ; which is continued by the fimbriated extremity of the Fallopian tube, embracing the vesicle as it bursts ; and which is exhibited still further by the formation of the decidua

* It has been suggested by Dr. Elliotson, that Dr. Haighton did not think even this *necessary* ; but only its application to the vagina ; yet the Doctor, in his lectures (MS.), certainly made the first link in his chain of sympathies, to consist in the application of the semen to the uterus.

in the uterus, long before the ovum descends into its cavity, and even in cases of extra-uterine pregnancy; by the secretion of mucus at this period, plugging up the os uteri; by the development of the mammæ, and the establishment of the secretion of milk, &c.

It must be confessed, that this theory has the merit of being beautiful and simple, but it rests on the assumption, which requires proof, that the formation of a *corpus luteum*, is a test of impregnation.

In these experiments, though the Graafian vesicles burst, and corpora lutea were formed, no foetus was in any one instance discovered, because, infers the Doctor, *the ova could not be conveyed into the uterus*. But is it not as reasonable to infer, that the ova thus *stimulated to action by copulation*, were not *fecundated*, and consequently did not form fætuses? But then, *this very experiment would go to prove the necessity of the actual contact of the male semen with the ovum*; the ovum being blighted in consequence of this contact having been rendered impracticable by the ob-

literation of the Fallopian tube. So true is it, that the very opposite conclusions may be drawn from the same facts, by different processes of reasoning.

“ It must remain a question, whether “ the Graafian vesicles burst from the in-“ fluence of the *semen masculinum*, or merely “ *from the act of copulation*, the *semen im-“ pregnating only the contents of the vesicles,* “ *after their escape from the ovaria**.”

If the corpus luteum be not assuredly a test of fecundation, then Dr. Haighton's experiments will go to prove that vesicles may be stimulated into action by coitus only; and that they can be alone *fecundated* by the actual contact of the male semen. It is another remarkable circumstance that no extra-uterine foetuses were formed, *although corpora lutea existed*, unless it be granted that the ova were not fecundated.

* Blumenbach, by Elliotson, p. 324.

Burns, who is an advocate of the sympathetic theory, observes, "It would appear, " that although an ovum be impregnated, " yet, by various causes, the process after- " wards may be interrupted; the ovum " shrivels and is absorbed. If there be an " *impervious state* of the tubes, or any *confor-* " *mation or condition* rendering it impossible " for a child to be supported, the ovum de- " cays, and the woman is barren. Or, if " such a state be induced after impregna- " tion, and before the ovum descends, the " process stops*."

In proof of this position, Burns refers to the experiments of Dr. H.; but instead of all these gratuitous assumptions, would it not be more scientific to allow, that the corpus luteum was not a test of *fecundation*, but merely an evidence of the vesicle having been excited to action, an effect which could be produced by coitus, under circumstances, where *no fecundation could occur.*

* Burns's *Midwifery*, p. 112.

In confirmation of this reasoning, I cannot avoid referring to some ingenious experiments, which have been indirectly communicated to me, and which go to prove that the corpus luteum is *not a test of conception*, and that the semen must be *actually applied* to the ovum, in order to insure fecundation: consequently that there can be no fear of extra-uterine foetuses where the Fallopian tubes have been obliterated. These experiments have been conducted with peculiar accuracy by my quondam friend, and fellow student, the indefatigable Dr. Blundell: but as I understand they are shortly to be presented to the Royal Society, it would be injustice to anticipate their most interesting details.

It is farther *suggested* by Dr. Elliotson, that the venereal ardour, carried in copulation to its highest point, is capable of laying the foundation for the rupture of Graafian vesicles, which, upon the testimony of Cruickshank and Saumarez, are found to be enlarged under such circum-

stances. The same appearances are mentioned by many other authors*.

Blumenbach is of opinion, that the contents of a vesicle may be discharged, and a corpus luteum formed in virgins; and he entertains this idea, not simply from the analogy of birds, but also from the accounts which we have of such examples, related of young women, who were inhabitants of warm climates, and subject to hysterical affections†.

How the male semen acts upon the female ovum we know not; and this will probably ever remain concealed from us. Nor is it important to penetrate the veil by which it is obscured.

From the whole evidence advanced, we may conclude, the beautiful sympathetic theory is defective in its first principle, viz.

* Blumenbach, by Elliotson, p. 329.

† Blumenbach, p. 312. Note to paragraph 562, and p. 330.

the existence of the corpus luteum, as an evidence of fecundation: consequently its conclusions are of no value.

3. I shall mention particularly but one other theory, that of Hamme, which was more fully developed by, and the discovery of which has been unjustly given to, Lewensoeck. By the aid of a microscope these theorists fancied they discovered in the semen masculinum, an innumerable host of infinitely minute animalcula; and they concluded, of course, that these animalcula were capable of becoming, by their development, beings similar to those from which they were produced. According to this theory, several of the animalcula arrive at one of the ovaries, which is considered only as the nidus for their reception. The *most vigorous* animalcule, after combating with its fellows for peaceable possession, at length fixes its abode in one of the vesicles, and is thence conveyed into the uterus to be finally developed.

To enumerate any other similar "theory,"

or to attempt a refutation of such irrational hypotheses, would be absurd. The reader who wishes to know more of such argumentation, may be gratified by the theories of the authors named in the margin*.

In conclusion, from the whole train of this argument, we may infer with safety, that whether we adopt the theory of a seminal fluid secreted also by the female, and conveyed from the ovaria to the uterus, there to be mixed with the male semen ; or if we prefer the idea of the latter fluid being actually conveyed to the ovarium and ovum ; or if we entertain the notion of an *aura seminalis*, exhaled and conveyed in the same manner to the ovum, in order to produce fecundation ; or, lastly, if the animalcular theory of Lewenhoëck should engage our assent, we should find *in each*

* Consult the works of Harvey, Lewenhoëck, Needham, Haller, Blumenbach, Cruickshank and Haughton in Philosophical Transactions, Saumarez, Richerand, Majendie, Hunter, Dr. W. Cheselden, Denman, Burns, Gardien, Capuron, and the Dictionnaire des Sciences Médicales, vol. 6. p. 204. Article *Conception*; et vol. 14. p. 473. Art. *Fécondation*.

one of these cases, that the *Fallopian tubes must be pervious*; and as in the case of Mrs. Glasscock, these must be obliterated, it follows that there can be no danger of extra-uterine impregnation.

With regard, too, to the sympathetic theory, it has been decidedly shown, by the experiments of *its author*, that where the Fallopian tube was *obliterated*, *no extra-uterine fœtuses were produced*; consequently there would be no fear, even if this *theory were correct*. And moreover it has been inferred, by fair induction, from experiments, and other sources of information, that the theory is unfounded, since a *corpus luteum is not a test of impregnation*, and consequently the experiments of Dr. Haighton, prove that extra-uterine pregnancy cannot take place where the Fallopian tube is obliterated.

On the whole, we conclude that there is no objection to the operation of extirpating the uterus, on the ground of any supposed prospective mischief arising from *the danger of fecundation*. 3

POSTSCRIPT.

Since the foregoing pages were written, the Author has been informed of four other cases of Inversio Uteri, three of which have occurred since *January 1st, 1817.* Two of these instances were attended with fatal consequences, three or four months after confinement: the others are at present under the care of practitioners of the highest respectability in London and Manchester: and it is hoped, that they will ere long be added to the list of successful cases of extirpation. These facts shew the frequency of the disease, and loudly call upon us for all the relief we can afford. The Author will feel gratified and obliged by any communications from his professional brethren, which shall enable him to pursue the subject, and confirm or destroy his reasonings, by the sure test of experience.

June 4th, 1818.

FINIS.





